

## Academy of Breastfeeding Medicine Clinical Protocol #7: Model Maternity Policy Supportive of Breastfeeding

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### Abstract

**Background:** The Baby-Friendly Hospital Initiative is a WHO-UNICEF evidence-based initiative aiming to improve quality of care in maternity facilities through global implementation of the *Ten Steps to Successful Breastfeeding* as standards of perinatal care. Although each step is evidence-based, all Ten Steps are intended to work synergistically. Step 1b requires maternity facilities to adopt an infant feeding policy that supports breastfeeding.

**Key Information:** This protocol updates the Academy of Breastfeeding Medicine's 2018 Model Maternity Policy Supportive of Breastfeeding and gives readers the most recent evidence basis. It includes a model policy that can be adapted to local needs. Its strength lies in the synergy of all its components. The importance of protecting families from the harmful influence of the commercial milk formula industry is stressed. The policy includes recommendations to verify health workers' competencies to adequately support breastfeeding, to offer prenatal education on breastfeeding to mothers and families, guidance for respectful and patient-centered care during childbirth, and immediate and postnatal support for mother and child. Safety issues are considered. Tools for implementation are included.

**Recommendations:** Maternity facilities must have a policy that protects and supports breastfeeding. It should include all the Ten Steps, which must be implemented as a whole package. External assessments are recommended to ensure compliance with requirements. Continuous monitoring of practices should be routine. Ensuring that health workers who deal directly with mothers and infants have the competencies needed to protect and support breastfeeding through counseling and person-centered care is strongly recommended.

**Keywords:** breastfeeding, exclusive, maternal health service, hospitals, maternity, quality improvement

**About ABM Protocols:** A central goal of the Academy of Breastfeeding Medicine (ABM) is the development of clinical protocols for managing common medical problems that may impact breastfeeding success. These protocols serve only as guidelines for the care of breastfeeding mothers and infants and do not delineate an exclusive course of treatment or serve as standards of medical care. Variations in treatment may be appropriate according to the needs of an individual patient. The ABM empowers health professionals to provide safe, inclusive, patient-centered, and evidence-based care. Pregnant and breastfeeding women and others who are pregnant and lactating identify with a broad spectrum of genders, pronouns, and terms for feeding and parenting. There are two reasons ABM's use of gender-inclusive language may be transitional or inconsistent across protocols. First, gender-inclusive language is nuanced and evolving across languages, cultures, and countries. Second, foundational research has not adequately described the experiences of gender-diverse individuals. Therefore, ABM advocates for, and will strive to use, language that is as inclusive and accurate as possible within this framework.

For more explanation, please read *ABM Position Statements on Infant Feeding and Lactation-Related Language and Gender and Breastfeeding As a Basic Human Right*.

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## Introduction

### Background

**B**reastfeeding is the biological norm and a basic human right.<sup>1</sup> Early cessation of breastfeeding carries important maternal and infant health risks as well as considerable social and environmental costs worldwide.<sup>2–9</sup> Evidence shows that the care that the mother and the infant receive perinatally impacts breastfeeding outcomes, thus affecting the health outcomes of mother and child.<sup>10–12</sup>

The Baby-Friendly Hospital Initiative (BFHI), launched by the World Health Organization (WHO) and the United Nations International Children's Emergency Fund (UNICEF) in 1991 and last updated in 2018, aims to improve this care worldwide.<sup>13</sup> The BFHI aims for global implementation of the *Ten Steps to Successful Breastfeeding* as standards of perinatal care, which now include abiding by the *International Code of Marketing of Breast-Milk Substitutes* (The Code), see Table 1.<sup>13,14</sup> It is an evidence-based intervention shown to improve quality of care in maternity facilities.<sup>15–18</sup> The Ten Steps are intended to work synergistically and should not be implemented separately. Since its launch in 1991, the BFHI has been implemented widely<sup>19</sup> and has demonstrated a positive impact on breastfeeding and maternal and infant health.<sup>10,20–23</sup> However, inconsistent global implementation of the BFHI,<sup>19,24</sup> unethical marketing practices deployed by the commercial infant milk formula industry (CMF),<sup>25–27</sup> and other social and structural determinants of health<sup>28–31</sup> have resulted in widespread breastfeeding disparities, inequity in access to breastfeeding care and support, and unequal rates of morbidity and mortality for women and children.<sup>2,32–35</sup> Hereafter, the term “commercial milk formula” (CMF) refers to any kind of infant formula or product intended to substitute breast milk, including follow-up formula and any kind of “specialty formulas” such as hydrolyzed formula or any formula intended to be given to children from birth to 36 months.<sup>36</sup>

This protocol considers the needs of any infant and any parent to bond and get help with infant feeding, while protecting breastfeeding as the normative way of feeding the human infant. The protocol and attached policy also include

the needs of adopted newborns and their adoptive parents, infants born to surrogate mothers and their non-puerperal parents, and infants born to transgender parents.<sup>37–40</sup> Such individuals are included in the words “mothers,” “parents,” and “infants.”

### Purpose and use

The Maternity Policy within this protocol aims to help maternity facilities comply with the requirements of the BFHI implementation guidance.<sup>13</sup> The BFHI is a model with proven efficacy, and its strength lies in the conjoint action of all its components.<sup>23,41</sup>

The model policy presented here may need to be locally adapted. Some countries' national Baby-Friendly accreditation standards may be more or less stringent than the Global Criteria<sup>13</sup> and those described herein. Thus, the policy may require minor changes to conform to specific country requirements. It will also need to be adapted to each specific facility; for example, by including the name of the facility, the date of revision, and each facility's process of approval and implementation.

This document presents a model maternity policy that promotes, supports, and protects breastfeeding. It is more comprehensive than an infant feeding policy, and it contains all the elements needed in an infant feeding policy to comply with BFHI Step 1b. It is a policy for maternity facilities, but it is not intended that it be comprehensive of all aspects of maternity care. It includes those aspects of maternity care that impact infant feeding directly or indirectly, including mothers' self-efficacy and patient-centered care.

### Updates in the 2025 model maternity policy

This protocol and the attached policy offer some practical updated additions to the 2018 version of the #7 ABM protocol.<sup>42</sup> This has been revised based on an updated literature review including new evidence, new and updated ABM protocols, and recent WHO/UNICEF publications on prenatal care, childbirth,<sup>12</sup> postnatal care,<sup>43</sup> breastfeeding counseling,<sup>44,45</sup> training on breastfeeding counseling,<sup>46</sup> competency verification for health care personnel (HCP),<sup>47</sup> and skin-to-

TABLE 1. TEN STEPS TO SUCCESSFUL BREASTFEEDING<sup>13</sup>

Critical management procedures	<i>Step 1. Policies</i>
	1a. Comply fully with the International Code of Marketing of Breast-Milk Substitutes and relevant World Health Assembly resolutions.
	1b. Have a written infant feeding policy that is routinely communicated to staff and parents.
Key clinical practices	1c. Establish ongoing monitoring and data-management systems.
	<i>Step 2. Ensure that staff have sufficient knowledge, competence, and skills to support breastfeeding.</i>
	<i>Step 3. Discuss the importance and management of breastfeeding with pregnant women and their families.</i>
	<i>Step 4. Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth.</i>
	<i>Step 5. Support mothers to initiate and maintain breastfeeding and manage common difficulties.</i>
	<i>Step 6. Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated.</i>
	<i>Step 7. Enable mothers and their infants to remain together and to practice rooming-in 24 hours a day.</i>
	<i>Step 8. Support mothers to recognize and respond to their infants' cues for feeding.</i>
	<i>Step 9. Counsel mothers on the use and risks of feeding bottles, teats, and pacifiers.</i>
	<i>Step 10. Coordinate discharge so that parents and their infants have timely access to ongoing support and care.</i>

skin contact (SCC) for preterm, low birthweight (LBW), and sick neonates.<sup>48,49</sup>

It also includes additional information on safe rooming-in practices<sup>50,51</sup> and new content about the commercial determinants of health.<sup>25,27,29,52–54</sup> In this update, we have eliminated the advice to teach breast massage for mastitis, as recent evidence-based recommendations show that it can injure engorged or inflamed breast tissue.<sup>55</sup> However, gentle compressions during breast pumping, similar to hand expression, are acceptable, as is light sweeping of the skin.<sup>55</sup>

There is stronger evidence against using bottles in preterm infants<sup>56</sup> and allowing pacifiers for preterm infants if the mother is not available.<sup>57</sup> We are making new recommendations around the use of artificial teats for supplementation, as there are new high-quality data for avoiding artificial teats in preterm infants.<sup>56,58–60</sup> Evidence points to cup feeding as being preferable to other modes of supplemental feeding in term and preterm infants.<sup>56,61</sup> Some newer high-quality evidence also found success with syringe feeding or feeding with a tube at the breast in preterm infants.<sup>58,60,62,63</sup>

We have also updated guidance on HIV and breastfeeding to reflect the recommended shared decision-making approach to feeding decisions in the setting of maternal HIV infection: supporting a mother's decision to breastfeed when conditions are met of undetectable viral load, appropriate suppressive treatment, and availability of follow-up.<sup>64,66,79</sup>

We have added the importance of using the chosen pronouns for transgender and nonbinary parents, as well as their chosen terms for breast milk and infant feeding.<sup>80–84</sup> Transgender men or nonbinary people (recorded as female at birth) who have undergone surgery to remove breast parenchyma to achieve a flatter chest wall can be expected to have impaired milk production and transfer. They may wish to feed at the chest with or without the use of supplemental devices or, conversely, may feel uncomfortable with the idea of breastfeeding.<sup>40</sup> In addition, the non-birthing parent, who may be cisgender female, transgender female, or another gender identity, may wish to induce lactation for the infant.<sup>85,86</sup> Therefore, the model policy is intended to include birthing and lactating parents of any gender identity.

We recommend the provision of accessibility-centered materials using multiple communication options that all

TABLE 2. ABSOLUTE AND RELATIVE CONTRAINDICATIONS TO BREASTFEEDING

<i>Mother's conditions</i>	
Ebola virus	Suspected (until ruled out) or confirmed maternal Ebola virus. <sup>a,b</sup>
Herpes virus	Mothers with active herpetic lesions on the breast(s) must not feed with the affected breast but can with the other. (Expression and discarding of milk should be encouraged to maintain milk supply until breastfeeding is resumed.) <sup>a,b</sup>
HIV	Maternal Human Immunodeficiency Virus infection is a contraindication to breastfeeding in areas where artificial feeding is feasible, affordable, sustainable, and safe and the mother is not on antiretroviral therapy and/or does not have a suppressed viral load during pregnancy (at a minimum throughout the third trimester) and at delivery. Mothers with HIV who are on antiretroviral medication with a sustained undetectable viral load and who choose to breastfeed should be supported in these decisions. <sup>b,c</sup>
HTLV I and II	Mothers with human T cell lymphotropic virus (HTLV) type I are advised not to breastfeed in many countries. Mothers with HTLV I in some countries, and mothers with HTLV II, may be offered the choice of short-term breastfeeding after shared decision-making. <sup>b,d,e</sup>
Varicella	Mothers with onset of Varicella within 5 days before or up to 48 hours after delivery, until no longer contagious. Mothers should be encouraged to express milk for infant feeding. <sup>b,e</sup>
Brucella	Brucellosis, until treated for 48–96 hours. <sup>b,e</sup>
Tuberculosis	Mothers with active, untreated pulmonary tuberculosis (until no longer contagious: 15 days of treatment) should not breastfeed, but the infant can be given the mother's own expressed milk. However, unless the diagnosis has been made in the 15 days predelivery, the infant will have been exposed by the time of the diagnosis and must receive prophylaxis with isoniazid. There might thus be no reason to separate them if the infant is already being treated. Expert consultation is advised. <sup>b,e</sup>
Medications	Treatment with some medications, such as chemotherapy, may require temporary or permanent cessation of breastfeeding. Check with InfantRisk.com, E-lactancia, Lactation Study Center, Hale's webpage, or other locally available accurate resources. <sup>f,g,h,i</sup>
Illicit drugs	Current use of illicit drugs (e.g., cocaine, heroin, phencyclidine) as determined on a case-by-case basis by the infant's health care provider. <sup>j</sup>
<i>Infant's conditions</i>	
Inborn errors of metabolism	Galactosemia, except for Duarte variant, in which partial breastfeeding is possible. <sup>k</sup> Primary lactase deficiency. <sup>l</sup> Other inborn errors of metabolism that may allow for partial breastfeeding but require supplementation with specific commercial milk formula formulations (phenylketonuria, maple syrup disease). <sup>m,n,o</sup>

References: <sup>a</sup>CDC (2023)<sup>64</sup>; <sup>b</sup>World Health Organization<sup>65</sup>; <sup>c</sup>Perinatal HIV Clinical Guidelines<sup>66</sup>; <sup>d</sup>Itabashi et al. (2023)<sup>67</sup>; <sup>e</sup>Meek (2022)<sup>68</sup>; <sup>f</sup>InfantRiskCenter<sup>69</sup>; <sup>g</sup>E-lactancia<sup>70</sup>; <sup>h</sup>Hale and Krutsch (2023)<sup>71</sup>; <sup>i</sup>Lactation Study Center<sup>72</sup>; <sup>j</sup>Harris et al. (2023)<sup>73</sup>; <sup>k</sup>Demirbas et al. (2018)<sup>74</sup>; <sup>l</sup>Toca et al. (2022)<sup>75</sup>; <sup>m</sup>Kalvala et al. (2023)<sup>76</sup>; <sup>n</sup>Zuvadelli et al. (2022)<sup>77</sup>; <sup>o</sup>Vitoria-Miñana et al. (2023).<sup>78</sup>

families and health care workers can understand, including offering different languages and modalities, such as images, videos, and tactile materials (e.g., models and dolls).

Finally, all health care professionals who work in birthing centers should regularly engage in insightful examination of their implicit biases through self-reflection, listening, and continuous education. Efforts to eliminate implicit biases will facilitate the conscionable provision of equitable, respectful, and patient-centered care for all individuals.

#### *Related ABM protocols*

ABM Protocols #1 (Hypoglycemia),<sup>87</sup> #2 (Birth Hospitalization Discharge of Breastfeeding Dyads),<sup>88</sup> #3 (Supplementary Feedings),<sup>89</sup> #5 (Peripartum Breastfeeding Management),<sup>90</sup> #6 (Bedsharing and Breastfeeding),<sup>91</sup> #10 (Breastfeeding the Late Preterm Infant),<sup>92</sup> #12 (Transitioning the Breastfed Preterm Infant from Neonatal Intensive Care to Home),<sup>93</sup> #14 (Breastfeeding Friendly Physician's Office),<sup>94</sup> #19 (Breastfeeding Promotion in the Prenatal Period),<sup>95</sup> #21 (Substance Use and Breastfeeding),<sup>73</sup> #26 (Persistent Pain with Breastfeeding),<sup>96</sup> #28 (Peripartum Analgesia and Anesthesia),<sup>97</sup> #33 (LGBTQ+ Patients),<sup>82</sup> #35 (Supporting Breastfeeding During Maternal or Child Hospitalization),<sup>98</sup> #36 (The Mastitis Spectrum),<sup>55</sup> #37 (Physiological Infant Care),<sup>99</sup> and the ABM Position Statement, "Infant Feeding and Lactation-Related Language and Gender,"<sup>80</sup> may serve as useful adjuncts to this protocol.

#### **Methods**

In creating its protocols, the Academy of Breastfeeding Medicine assembles teams of volunteer experts from relevant practice settings, disciplines, and locations around the globe. Authors are not limited to medical doctors or ABM members. In this revision, we conducted a comprehensive literature review with searches limited to published evidence from 2018 to August 2024 for each topic, but older articles were used if there were no more recent relevant high-quality articles. Sections were distributed among the authors, who identified the relevant questions and performed a literature search using pertinent search terms. The search was conducted in PubMed MEDLINE as well as Web of Science, Cumulative Index of Nursing and Allied Health Literature (CINAHL), and EMBASE for some sections. Articles that were only tangentially related to the topics analyzed were excluded. Preference was given to systematic reviews, randomized clinical trials, well-designed case-control studies, or prospective cohort studies. Low-quality evidence articles such as case studies or chart reviews were not included if better-quality studies were available. We included relevant gray literature, particularly if published since 2018. We also reviewed literature on quality improvement collaboratives established for the purpose of improving maternity care practices. Multi-institutional quality improvement collaboratives can be interpreted as pre-post-intervention trials with baseline as the control arm. A formal systematic review was not performed because of the broad nature of the many topics included.

We reviewed all identified literature, removed duplicate citations, applied exclusion criteria, and assigned each source a level of evidence using criteria of the Strength of

Recommendation Taxonomy (SORT).<sup>100,101</sup> The level of evidence from 1 to 3 for each source was based on study design and methodology, ranging from good to limited. The team then formulated and ranked each recommendation, A, B, or C, based on quality, quantity, and consistency of the assembled evidence according to SORT criteria. Each recommendation was based on a framework of patient-oriented outcomes measuring changes in morbidity and mortality. The draft was then peer-reviewed by members of the Protocol Committee and the ABM Board, and other experts within the organization. After a series of appropriate revisions, the protocol was approved by the Protocol Committee and the ABM Board prior to publication. The protocol was first written and published in English in the journal *Breastfeeding Medicine* and published on the ABM website.

#### **Key Information**

*Evidence for supporting and protecting breastfeeding and human milk feeding for all at-term newborns, infants, and young children*

The mother's breast is the natural habitat of newborns and infants, and non-initiation or early cessation of breastfeeding poses significant risks to maternal and infant health as well as significant social and environmental costs worldwide.<sup>2-9,102</sup> The first years of life are critical for the development and growth of most organs and systems, for the acquisition of social and affective behaviors, and for the establishment of a mature immune system. Breastfeeding provides the best components by providing the newborn, infant, and young child with the species-specific food tailored to their needs. This is essential for all human infants, who are born immature, even if born at term. Breastfeeding is not only the best source of nutrition but it is also a source of comfort, peace, loving warmth, and security for the baby, and it offers the best environment for development and growth. Neuroscience shows us that the act of breastfeeding induces positive durable changes in brain function in both the infant and the mother.<sup>103-105</sup> A positive breastfeeding experience also helps improve maternal care and creates an indissoluble bond between mother and child.<sup>106,107</sup> In addition, breastfeeding brings closure to the reproductive process and benefits the mother's health in the short, medium, and long term. Evidence shows that non-breastfeeding infants are at higher risk of infectious diseases, allergic and immune-related diseases, various cancers, and poorer neurodevelopmental outcomes.<sup>4,108</sup> Postpartum hemorrhage, reproductive cancers, coronary heart disease, type 2 diabetes, stroke, and hypertensive disorders are more common among non-breastfeeding mothers and more frequent among short-term breastfeeding mothers than among longer-term breastfeeding mothers.<sup>2,7,8,109-114</sup>

Mothers and infants need support and protection to successfully breastfeed,<sup>115</sup> and the care they receive in the first few days after birth may determine the success or failure of breastfeeding.<sup>13</sup> Some social determinants and cultural practices, unsupportive health systems or practices, exposure to unethical marketing practices by the competing CMF industry, and some specific maternal or infant health problems can adversely affect breastfeeding in the first days and weeks after birth.<sup>27</sup> Unfortunately, all or some of these influences may be critical in determining the failure, exclusivity, or



duration of breastfeeding.<sup>116</sup> In 1981, after decades of inadequate breastfeeding support and protection in maternity facilities worldwide, and with the infant CMF industry leading the way in educating health care workers, the World Health Assembly approved The Code to prevent aggressive marketing practices that undermine breastfeeding.<sup>14,117,118</sup> In 1989, WHO and UNICEF promoted the adoption of the *Ten Steps to Successful Breastfeeding* (The Ten Steps) and affirmed the important role of maternity facilities to promote, protect, and support breastfeeding.<sup>119</sup> In 1991, both organizations launched the BFHI as a global strategy to improve the quality of care by implementing these standards of care.<sup>120</sup> Compliance with The Code is a key element of the BFHI.<sup>13</sup>

#### *Evidence for the Baby-Friendly Hospital Initiative*

The BFHI has been shown to improve breastfeeding outcomes globally, in high-, medium-, and low-income communities or countries, and in urban or rural settings.<sup>21</sup> Improvement in breastfeeding outcomes occurs regardless of whether baseline breastfeeding rates are low or high.<sup>15,121</sup> The BFHI is a quality improvement initiative that sets standards of care, similar to other quality improvement initiatives.<sup>122</sup> These standards are embodied in the WHO and UNICEF Ten Steps.<sup>13,119</sup> The evidence supports their use as a bundle, with results being worse if only one or a few steps are implemented.<sup>10,123,124</sup> Organizations perform better when they are held accountable to an outside body, and ensuring quality of care requires external assessment of practices.<sup>125</sup> BFHI coordinating committees and coordinators ensure the quality of care in baby-friendly certified maternity facilities through external assessments that verify compliance with global criteria. Baby-friendly accreditation is an incentive for facilities, countries, and health authorities, who see their efforts to comply visible and verified,<sup>126</sup> and may attract others to work toward certification. This type of peer influence is a well-known strategy to improve quality of care.<sup>122</sup> Continuity is ensured through external reassessments for re-accreditation of facilities every 3–5 years. Staged implementation may be useful to achieve desired change of practices, but only if external assessments occur at each stage.

Quality improvement collaboratives of hospitals established to improve maternity care practices have demonstrated an effect to increase overall and exclusive breastfeeding.<sup>127</sup> Implementation at the country level has also contributed to enhanced breastfeeding support around the world and to improved maternal perception of the quality of care provided. More research is needed to examine quality improvement initiatives focused on the BFHI and its impact on newborns cared for in the NICU.<sup>121,128</sup>

#### *Evidence for ensuring compliance with The Code*

Violations of The Code clearly undermine breastfeeding.<sup>27,54,129–132</sup> Avoiding conflicts of interest by complying with The Code and World Health Assembly-related resolutions<sup>133</sup> protects mothers from predatory practices from the CMF industry that are associated with subsequent early cessation of breastfeeding.<sup>26,27,134</sup> In many hospitals, breastfeeding is compromised by the distribution of free

CMF and other products by the CMF industry, directly or through HCP, and by the display of noncompliant promotional products, including those with logos of CMF companies.<sup>54,135–137</sup> Breastfeeding support is also weakened when HCP have conflicts of interest incurred by accepting gifts such as food, free conferences, subsidized materials, or training from the CMF industry.<sup>27,54,135,138,139</sup>

#### *Evidence for supporting and protecting the provision of breast milk and breastfeeding for preterm, low birthweight, and sick neonates*

Prematurity and LBW are related to negative effects on neurodevelopment and cognition, lower overall health-related quality of life, and obesity.<sup>140–142</sup> Evidence shows the need to also support and protect breastfeeding and breast milk provision for preterm, LBW, or sick neonates.<sup>49,143</sup>

Breastfeeding and receiving mother's own milk (MOM) in the NICU among LBW and preterm infants are related to reduced morbidity, superior neurobehavioral development, higher exclusive breastfeeding rates at discharge, and longer breastfeeding duration.<sup>49,144–148</sup> Receiving MOM and sooner exposure to first enteral feeding with it have demonstrated beneficial effects on morbidity and development over safe donor human milk from a human milk bank and are related to improved neurodevelopmental breastfeeding outcomes in very LBW infants.<sup>144</sup> Oropharyngeal administration of colostrum, in the first hours or days, decreases the incidence of necrotizing enterocolitis, late-onset sepsis, and neonatal death, and shortens the time to full enteral feeding and days to recover birthweight.<sup>149,150</sup> Safe donor human milk has demonstrated superiority over preterm formula, which increases the risk of bronchopulmonary dysplasia and necrotizing enterocolitis.<sup>146,151–153</sup> Mother's milk production may be enhanced by early initiation of milk expression after birth, combining hand expression and pump use, pumping frequently, feeling comfortable with the breast pump, and pumping near the baby after practicing kangaroo mother care (KMC).<sup>154–159</sup> KMC is defined by WHO as continuous and prolonged SCC, preferably 24 hours daily, with a minimum of 8 hours daily, with support for exclusive breastfeeding or breast-milk feeding for preterm or LBW neonates.<sup>49</sup> Lower exclusive breastfeeding and any breastfeeding rates and shorter breastfeeding duration have been reported for preterm and LBW infants globally.<sup>49,160–162</sup>

Promoting nonnutritive sucking at the breast<sup>163</sup> and avoiding nipple shields<sup>164</sup> may enhance the probability of exclusive breastfeeding; however, pacifiers may be used when the mother is not available.<sup>57</sup> The latest evidence supports oromotor therapy<sup>58,165</sup> and avoiding bottles.<sup>56</sup> The strongest evidence to help premature infants transition to oral feeding and full breastfeeding is with use of a supplemental feeding tube device taped to the mother's breast, a syringe, or a cup.<sup>58,62,63,166</sup> A soft-sided silicon cup may be superior to a traditional firm medicine cup in preterm infants.<sup>167</sup> It should be noted that there may be national standards for substances that come in contact with food. Syringes are generally made of polypropylene and do not usually contain known harmful substances. It is unlikely that short-term contact with breast milk or colostrum constitutes a problem, but for longer-term storage, consider food-grade materials.<sup>168</sup>

Much has been published in the last 5 years to improve the care of preterm infants in the NICU and to support and promote human milk feeding, breastfeeding, and exclusive breastfeeding for this population. Breastfeeding and human milk feeding together with decreased environmental stressors (loud noises, bright lights),<sup>169,170</sup> KMC,<sup>171</sup> developmentally appropriate individualized care,<sup>172</sup> family involvement in direct care,<sup>173</sup> and breastfeeding support in the NICU<sup>174,175</sup> are critical to improving neonatal outcomes. Standards for NICU design<sup>176</sup> and neonatal care guidelines<sup>49,159,171,177</sup> are complementary and holistic approaches to this care. Early, frequent, and sustained KMC is essential to protect the health and survival of preterm and LBW neonates. KMC is related to improved breastfeeding outcomes, earlier initiation of direct breastfeeding, and more and longer duration of breastfeeding and of exclusive breastfeeding.<sup>23,143,178–181</sup> It is a valued and empowering experience for mothers and parents that reduces their anxiety and depression.<sup>182,183</sup> KMC improves neonatal cardiovascular and thermal stabilization and neurodevelopmental outcomes.<sup>184–188</sup> It is also clearly related to decreased morbidity and mortality in the neonatal period and does not increase the length of NICU stay duration.<sup>48,185,189–191</sup> KMC is associated with better cognitive outcomes and with reduced school absenteeism and other undesired behaviors such as hyperactivity, aggressivity, or socially deviant conduct.<sup>190,192</sup> It is also related to better social integration in adulthood.<sup>184</sup>

Support from HCP and peers is paramount for mothers of these neonates,<sup>193</sup> and evidence shows that parents must be considered main caregivers of their sick, low-weight, or preterm newborns in the neonatal unit.<sup>171,173,188</sup> Given the need for MOM and SSC, separating infants from their mothers during their stay at the maternity facility should be avoided.<sup>188,194,195</sup>

#### *Evidence for patient-centered maternity practices during labor and birth*

Maternity practices that support breastfeeding, such as those advocated by the BFHI, can reduce breastfeeding inequities,<sup>21</sup> improve birth outcomes, and decrease infant and maternal mortality,<sup>17,23,27,166</sup> thus contributing to the United Nations' Sustainable Development Goals and the Global Strategy for Women's, Children's, and Adolescents' Health 2016–2030 objectives.<sup>196,197</sup> This is particularly relevant because, despite the 40% global reduction in maternal mortality from 2000 to 2023, progress has slowed since 2016, and an estimated 260,000 women died in 2023.<sup>197</sup> Furthermore, significant inequities exist in both maternal mortality and breastfeeding rates among and within countries.<sup>198–200</sup>

Access to patient-centered, evidence-based, and respectful maternity care is particularly important. This should include employing midwives and doulas and providing culturally sensitive care that addresses the concerns of mothers and families from historically oppressed groups.<sup>11,22,35,146,201–208</sup> High-level evidence shows that midwife-led care can decrease the use of unnecessary birth interventions and fetal mortality,<sup>203,206</sup> and that mothers cared for by midwives may be more likely to breastfeed than those cared for by obstetricians.<sup>209–211</sup> Culturally sensitive care also has a positive effect on breastfeeding.<sup>212–215</sup> There is high-level

evidence that continuous labor support by doulas or a family member or friend reduces the likelihood of cesarean birth in many settings.<sup>201</sup> This, in turn, may reduce barriers to the establishment of breastfeeding. Employing community health workers and facilitators, both in the hospital and after discharge, can improve both birth outcomes and breastfeeding.<sup>201,216</sup>

#### **Recommendations**

For each recommendation, the quality of evidence (levels of evidence 1, 2, and 3) and the strength of recommendation (A, B, and C) are noted as defined by the SORT criteria.<sup>100,101</sup>

1. *Adopt a hospital Infant Feeding Policy that directs the implementation of the BFHI as a quality-improvement process with the objective of offering high-quality, patient-centered care that supports and protects breastfeeding for all mothers and infants.* The policy should include implementing the Ten Steps as a whole package, monitoring practices that consider mothers' opinions and experiences, setting appropriate indicators, and ensuring quality through external assessments and sustainability through external reassessments. These measures protect the quality of maternal and infant care related to breastfeeding protection and support. Levels of evidence: 1, Strength of recommendation: A
2. *Include directions in the Infant Feeding Policy that specifically protect breastfeeding and the provision of human milk for preterm, LBW, or sick neonates.* The policy must ensure adequate care and support measures for these mother–infant dyads and families. Such measures include facilitating and supporting immediate, frequent, and sustained KMC, as appropriate to the infant's condition, together with facilitating the provision of MOM when breastfeeding is not possible and supporting mothers to breastfeed as early as possible. These require helping mothers to start expressing milk early, and to do it frequently, to achieve sufficient milk production and to be able to provide breast milk for their infants when direct breastfeeding is not possible. The use of safe donor human milk is recommended until MOM is available. Colostrum application to the oral mucosa of the oropharynx, as early as possible, and for at least 8 days to all preterm infants who are unable to breastfeed or receive enteral feeds, is recommended. Every effort must be made to keep mothers and infants together and to enable families to stay with their infants for as long, and as comfortably as possible, in the NICU. Providing support from peers and staff is strongly recommended. Levels of evidence: 1, Strength of recommendation: A
3. *The policy must include the need to abide by the International Code of Marketing of Breast Milk Substitutes to avoid undermining breastfeeding by advertising through the facility or incurring conflicts of interest.* While CMF may be needed for some infants whose mothers cannot or will not breastfeed after making an informed choice, there is ample evidence that direct or indirect marketing through the health care system to mothers and families undermines breastfeeding. By offering free or highly

subsidized infant formulae, gifts of any kind, sponsorship, or training to HCP, the CMF industry influences their decisions and makes them susceptible to conflicts of interest. Evidence shows that sponsorship alters professional attitudes. All mothers and infants deserve clinical advice provided by well-trained HCP that are free from spurious interests. Abidance by The Code is strongly recommended.

Level of evidence: 1, Strength of recommendation: A.

4. *Utilize patient-centered, evidence-based, culturally sensitive, and respectful care during labor, birth, and postpartum.* Respectful maternity care should be part of universal health coverage and encompass continuous support throughout the hospital stay, including a companion of the mother's choice, effective communication that uses appropriate language and attitudes, respect for every family's dignity, privacy, and confidentiality, protection from mistreatment or harm, and enabling mothers to make informed decisions based on complete, evidence-based information free from commercial interests. It also includes considering parents as primary carers of their preterm, LBW, or sick newborns in the NICU.

Levels of evidence: 1–2, Strength of recommendation: B.

## Summary

Maternity facilities must have a policy that protects and supports breastfeeding. The policy should ensure the adoption of all the Ten Steps as a whole package of standards of practice, which now include abiding by the International Code of Marketing of Breast-Milk Substitutes and continuous monitoring of practices. External assessment and surveying mothers' opinions are recommended to ensure compliance with requirements. Ensuring that HCP have the competencies and caring attitudes needed to protect and support breastfeeding, through counseling and patient-centered care, is strongly recommended. Because these competencies and attitudes of HCP are basic components of standard care, verifying competencies must inform their training. It is important to protect families from the harmful influence of the CMF industry by complying with The Code. A model policy, such as this one, must include aspects of prenatal education, guidance for respectful and patient-centered care during childbirth, as well as immediate and postnatal support for mother and child.

## Areas for Future Research

More evidence is needed on effective strategies to increase implementation of baby-friendly practices in the hospital setting, and on ways to ensure continued uptake and adherence to the BFHI worldwide. More information is needed on the best ways to monitor HCP's adherence to baby-friendly practices, including internal adherence to a hospital's own policy. The ideal frequency for assessing clinical competencies among HCP, and whether certain competencies should be assessed more frequently than others, is unclear. The outcomes of breastfeeding support provided by some HCP, such as IBCLCs and lactation specialists, warrant further research. Further evidence on maternal and infant microbiomes and chrono-nutrition may help further guide policies, particularly for preterm infants and infants who require supplementation.

Responsive feeding, best positions for breastfeeding, SCC with the partner and other relatives (when mother is not available), and supporting transgender parents' infant feeding experiences are other issues where adequate research is lacking.

## Model Maternity Policy Supportive of Breastfeeding

*A. A maternity care policy that promotes, protects, and supports breastfeeding*

1. This maternity facility ("facility" from here on) promotes breastfeeding as the best feeding practice for infants and mothers.
  - a. Breastfeeding is the biological norm for the human mother and infant (dyad), and feeding with CMF and other breast milk substitutes, and early weaning carry considerable maternal and infant health risks.<sup>4,8,10,217,218</sup>
  - b. This facility will also offer adequate, evidence-based, and unbiased information about feeding infants with CMF to any family who requests or needs it and will honor and support their informed choices. This information will not be provided through group sessions.<sup>13</sup>
2. This policy applies to all pregnant and birthing women and all other pregnant and birthing individuals, and to all infants, including those born to adoptive parents or other non-puerperal parents.
3. This facility recognizes the BFHI as the best and most efficacious intervention to support, promote, and protect breastfeeding at the hospital maternity level, and one that has a significant positive effect on the incidence and duration of breastfeeding.<sup>10,16–18,21–23,41,219,220</sup>
4. This facility recognizes the key role and responsibility of maternity facilities in the protection and care of mothers and infants during the first days of life, and their importance in establishing breastfeeding. Research has demonstrated the importance of maternity facilities in defining, adopting, and adhering to policies to ensure the protection and support of breastfeeding.<sup>10,11,35,221,222</sup>
5. This facility commits itself, in this document, to adopt an infant feeding policy and a maternity care policy that support breastfeeding, based on evidence and international recommendations.<sup>13,123</sup>
6. This policy addresses the responsibility of this facility to:
  - a. implement the Ten Steps to Successful Breastfeeding to support breastfeeding and maternity care practices that are patient-centered and evidence-based,<sup>13</sup>
  - b. comply with the International Code of Marketing of Breast-Milk Substitutes and subsequent resolutions of the World Health Assembly ("The Code"),<sup>14,26,133,223</sup>
  - c. monitor the implementation of these practices by establishing ongoing monitoring and data management systems,<sup>13</sup>
  - d. guarantee that HCP have the clinical competencies to protect and support breastfeeding,<sup>47,224</sup> which enable them to:
    - i. offer respectful, culturally appropriate, good-quality, evidence-based, patient-centered care



- that supports breastfeeding while respecting mothers' choices.<sup>13,23,225,226</sup>
- ii. follow the WHO and UNICEF recommendations embodied in the BFHI standards, and other current evidence-based guidelines, when developing all breastfeeding and infant feeding protocols and standards to be used in this facility,<sup>12,13,43,44,49</sup>
  - iii. offer respectful, nondiscriminatory care practiced with cultural humility for all parents and newborns, including foster and adopted infants.<sup>227</sup>
  - e. actively promote, protect, and support breastfeeding by implementing the Ten Steps, by enabling mothers and infants to practice immediate SCC and early breastfeeding after birth, and by supporting responsive parenting,<sup>12,13,43</sup>
  - f. guarantee the quality of perinatal care and support during pregnancy, labor, and birth for mothers and families that is timely, appropriate, and sensitive to their needs,<sup>28,228</sup> honors privacy and informed choice,<sup>12,229–231</sup> and secures continuity of support and coordination among providers.<sup>23</sup>
7. To guarantee implementation of this policy:
    - a. An Infant Feeding/Breastfeeding Committee, which is at the level of other quality improvement and clinical practices committees of the hospital, is convened.<sup>13</sup>
      - i. The committee will monitor and oversee the implementation of this policy.<sup>221,222</sup>
      - ii. It will be multidisciplinary and culturally appropriate, and be composed of representatives of decision-makers, quality assurance and management, HCP, including physicians, nurses, midwives, lactation specialists, and other appropriate staff in the areas of maternal and newborn health, and mothers and families.<sup>13</sup> Committee members will meet at least twice a year for monitoring purposes. They will assess implementation of the policy and determine how often to assess institutional compliance with the policy. Committee members will define actions needed to remain compliant with the policy.<sup>13</sup>
    - b. All staff will receive appropriate orientation to this policy in the first weeks after hiring and periodically afterward.<sup>13,231</sup>
    - c. There are clear written accountability mechanisms to redress comments, compliments, or complaints on the policy compliance, and there is a commenting mechanism that is easily accessible to mothers and families and its content is reviewed regularly.<sup>13,231,232</sup>
  8. To ensure continuous improvement in the quality of maternal and infant care in this facility, a data collection and monitoring mechanism will be implemented to routinely track the implementation of this policy, breastfeeding indicators, and mother–infant care indicators.<sup>13,233</sup>
    - a. Early initiation of breastfeeding and exclusive breastfeeding (from birth to discharge) are considered sentinel indicators and will be routinely tracked.<sup>13</sup>
    - b. Other indicators may be added whenever considered necessary by the Infant Feeding/Breastfeeding Committee.<sup>233</sup>
    - c. Breastfeeding indicators are incorporated into the facility quality-improvement monitoring system.<sup>13</sup>
  9. This facility protects and supports breastfeeding for its employees, allows for breastfeeding breaks, and has suitable areas available where all workers (including residents) may breastfeed, express, and store their milk in appropriate conditions.<sup>35,204,234–237</sup>
- B. Protecting breastfeeding and avoiding conflicts of interest**
10. This facility abides by The Code and related World Health Assembly resolutions<sup>14,118,133</sup> because non-compliance with them is a major factor for undermining breastfeeding.<sup>27,54,129–132,238–240</sup>
    - a. This facility does not promote CMF, nor related products covered in The Code. Direct contact of employees, manufacturers, or distributors of these products (“the CMF Industry”) with the public is not allowed in any part of the facility.<sup>13,27,54,133</sup>
    - b. Gifts of any kind (including nonscientific literature, materials, equipment, or money for staff, and materials, samples, coupons, or gift packs for mothers/families), any displays (including posters or placards) or educational material with brand logos, and any educational or other type of events sponsored or paid by the CMF industry and directed to HCP, pregnant women, mothers, or families are prohibited.<sup>117,131,133,135,241–243</sup>
    - c. Any product under The Code that may be needed by the facility (CMF, teats, bottles, pacifiers, and others) will be bought at fair market value.<sup>14,25,54,118,129,132</sup>
    - d. Periodic training on The Code is offered to HCP to avoid incurring conflicts of interest and to prevent conflicting advice to mothers and families.<sup>118,135,241,242,244</sup>
    - e. No promotional messages of the CMF industry or products covered under The Code, including digital marketing, are allowed in education materials aimed at mothers or families.<sup>13,118,136,239,241</sup>
    - f. This facility ensures safe preparation, safe handling of bottles and teats, and safe feeding of CMF.<sup>245,246</sup>
    - g. This facility does not offer group instruction on CMF preparation or use. Individual training and demonstrations for mothers and partners are offered to families who need this information because of a medical indication for supplementation, when breastfeeding is not possible or contraindicated (Table 2), and whenever parents make an informed choice not to breastfeed.<sup>13,231,246</sup> The risks of not breastfeeding and of using CMFs are fully explained to mothers who cannot, or choose not to, breastfeed or exclusively breastfeed.<sup>118</sup>
- C. Ensuring competent health care personnel**
11. This facility ensures that all HCP who provide education, assessment, support, assistance, and/or follow-up related to infant feeding (or who in any other way care for mothers and infants) have the competencies



TABLE 3. COMPETENCIES TO BE VERIFIED AMONG HCP WORKING WITH MOTHERS AND INFANTS IN MATERNITY FACILITIES<sup>a</sup>

1. Implement the Code in a health facility.
2. Explain the facility's infant feeding policies and monitoring systems.
3. Use listening and learning skills whenever engaging in a conversation with a mother.
4. Use skills for building confidence and giving support whenever engaging in a conversation with a mother.
5. Engage in antenatal conversation about breastfeeding.
6. Implement immediate and uninterrupted SSC.
7. Facilitate breastfeeding within the first hour, according to cues.
8. Discuss with a mother how breastfeeding works.
9. Assist a mother in getting her infant to latch.
10. Help a mother respond to feeding cues.
11. Help a mother manage milk expression.
12. Help a mother breastfeed a low birthweight or sick infant.
13. Help a mother whose infant needs fluids other than breast milk.
14. Help a mother who is not feeding her infant directly at the breast.
15. Help a mother prevent or resolve difficulties with breastfeeding.
16. Ensure seamless transition after discharge.

<sup>a</sup>Source: WHO 2020.<sup>47</sup>

HCP, health care personnel; SSC, skin-to-skin contact.

needed for appropriate breastfeeding see management, counseling, and support (Table 3).<sup>13,45,222,224</sup>

- a. The BFHI Competency Verification Toolkit standards published by WHO and UNICEF<sup>47</sup> set the minimum required for all direct care HCP to adequately support breastfeeding in the maternity setting. These competencies include knowledge of breastfeeding, practical skills to enable dyads to breastfeed and to manage breastfeeding difficulties, and interpersonal communication and counseling skills, including positive, respectful, and culturally sensitive skills, all of which are necessary to provide adequate breastfeeding support.<sup>13,247–249</sup>
- b. Competencies of HCP for breastfeeding support are assessed at hiring and periodically.<sup>224</sup> Whenever the result of the assessment fails to meet the performance indicators, feedback to guide future learning and to encourage self-reflection and self-remediation, in addition to training, will be offered. Various opportunities for professional growth, including in-service training and periodic updates with appropriate content, will be provided as needed, and competencies verified afterward.<sup>11,13,17,47,250,251</sup>
- c. Training resources with hands-on approaches and well-structured breastfeeding training courses, in line with the Ten Steps to Successful Breastfeeding and WHO/UNICEF recommendations, and with specific focus on breastfeeding counseling, are facilitated to all HCP as needed.<sup>44,46,249,251,252</sup>
- d. Supportive supervision is implemented to encourage the development of shared values among

different HCP within the clinical team to ensure that correct, current, and consistent information compliant with the BFHI is provided to all parents.<sup>253</sup>

12. Breastfeeding basic training is also periodically offered to all HCP who, working in the maternity facility, may have indirect contact with mothers and/or infants, such as housekeeping staff, ancillary staff, and others, to ensure concordant messages about breastfeeding are given.<sup>254</sup>
13. A designated HCP member keeps records and coordinates HCP competency verification and continuing education activities.<sup>222</sup>

#### D. Antenatal breastfeeding support and education

14. Mothers are empowered and counseled to have the birth experience most conducive to breastfeeding.<sup>95,255</sup> When relevant, patients will be asked about what pronouns they and their partners use, and what terms for infant feeding and breast milk they use.<sup>81–84</sup> These responses will be respected and recorded so they are available to be used at the time of labor and birth.
15. The prenatal history in the clinical record will include a detailed breastfeeding history with the mother's desired breastfeeding objectives, previous experiences, and risk factors for breastfeeding problems, if any.<sup>256–264</sup>
16. This facility acknowledges that all pregnant mothers attending prenatal care in this facility get personalized antenatal breastfeeding education with breastfeeding counseling tailored to their concerns and needs.
  - a. Prenatal education will be tailored to mothers' personal determinants (background, ethnicity, culture, socioeconomic, age), special needs, or any risk factor for early breastfeeding cessation (e.g., adolescents, minorities or disadvantaged groups, obesity).<sup>257,260,263–267</sup> Special consideration will be given to empower mothers and to increase their breastfeeding self-confidence by offering family-centered, gender-equitable, behavioral, and psycho-educational approaches.<sup>258,260,266,268,269</sup>
  - b. Communication with related facilities providing prenatal care in the community is enhanced and curricula about antenatal education activities are shared to ensure that all mothers receive the information they need and that messages are consistent across levels of care. A schedule with the information and dates where and when this is offered is available for any interested pregnant woman and her family.<sup>13,231</sup> Sessions are planned to start early in the first or second antenatal visit to avoid lack of information to women who may deliver prematurely.<sup>270,271</sup>
  - c. Both individual and group face-to-face sessions (more than three) are delivered. Partners and family are encouraged to participate.<sup>258,259,272</sup>
  - d. Midwives and HCP with lactation specialization are preferred to provide this antenatal education.<sup>210,273,274</sup>
  - e. The curriculum shared with pregnant women and their families includes essential information

TABLE 4. TOPICS TO BE COVERED IN ANTENATAL EDUCATION AND MODEL SCHEDULE

*Schedule for Antenatal Education*

Depending on the requirements of each facility and/or the national BFHI of the country, topics and antenatal information may need to be covered at a specific time. WHO and UNICEF recommend that these breastfeeding conversations begin at the first or second antenatal visit. One or more topics may be covered at a single visit.

<i>Visit date (Gest. week)</i>	<i>Topics</i>	<i>Staff signature</i>
Visit #: Date: Gest. week:	The right to receive respectful maternity care—which refers to care organized for, and provided to, all women in a manner that maintains their dignity, privacy, and confidentiality, ensures freedom from harm and mistreatment, and enables informed choice and continuous support during labor and childbirth.	
Visit #: Date: Gest. week:	Non-pharmacologic pain relief methods during labor. The influence of delivery methods on breastfeeding success.	
Visit #: Date: Gest. week:	Global recommendations and importance of breastfeeding. The importance of exclusive breastfeeding for the first 6 months. The risks of giving CMF, bottles, teats, and pacifiers. The importance of continuing breastfeeding after 6 months with appropriate complementary foods for the first 2 years or beyond. National and health-professional recommendations for infant feeding.	
Visit #: Date: Gest. week:	The importance of immediate and sustained skin-to-skin contact after birth. The importance of early initiation of breastfeeding.	
Visit #: Date: Gest. week:	The importance of rooming-in on a 24-hour basis. The importance of non-separating mother and infant during the stay at the maternity facility.	
Visit #: Date: Gest. week:	The basics of good positioning and attachment. Practical breastfeeding skills.	
Visit #: Date: Gest. week:	Responsive feeding and recognition of feeding cues.	
Visit #: Date: Gest. week:	Management of the most common initial challenges, such as pain, cluster feeding, perception of not producing enough milk, sleepy newborns, latching issues, engorgement, and practice of safe sleep.	
Visit #: Date: Gest. week:	The basics of milk supply and demand to ensure the infant's adequate nourishment.	

Gest. week, gestational week at which the visit should take place; Visit #, visit number; BFHI, Baby-Friendly Hospital Initiative; WHO, World Health Organization; UNICEF, United Nations International Children's Emergency Fund; CMF, commercial milk formula.

- pertinent to breastfeeding, and the education provided at each visit will be documented in the woman's clinical history (Table 4).<sup>13</sup>
17. Different types of mobile Health (mHealth) interventions (text messages, telephone calls, or internet) are used jointly with on-site educational activities, as they have been shown useful for antenatal information to improve breastfeeding outcomes and infants' and mothers' health.<sup>261,275,276</sup> mHealth training tools are accessible to all interested families and especially for those with difficulties accessing the facility.<sup>275–278</sup>
  18. This facility has a protocol for parents who need or wish to induce lactation. These may include non-birthing partners, adoptive or other parents (including those with infants born to surrogates or gestational carriers). These individuals may include cisgender women, transgender women or transgender men, or non-binary individuals. The protocol includes anticipatory guidance and plans for feeding. It will be implemented, whenever needed, under the supervision of trained lactation HCP, in the weeks or months before birth. An action plan will be discussed previously and reflect the family's values and the anticipated breastfeeding outcomes.<sup>39,279–282</sup>
  19. Prenatal expression of colostrum may be discussed, described, and demonstrated, at this time, to improve mothers' confidence and self-efficacy. This practice may be particularly useful for mothers with diabetes and/or obesity, mothers with preeclampsia, and mothers at risk for delayed lactogenesis.<sup>283–285</sup>
- E. Care during labor and birth*
20. Physiological labor and birth are promoted, and harmful practices and unnecessary, outdated interventions are discouraged.<sup>12,225</sup>
  21. All practices and interventions during labor, childbirth, and the early postnatal period in this facility

conform to a written, up-to-date guidance that minimizes the risk of instrumental vaginal delivery and of cesarean delivery. Both have been associated with adverse mother–child health and breastfeeding outcomes.<sup>226,286–293</sup>

22. Patient-centered, sensitive, and supportive care is offered.<sup>12,225,232,294</sup>
23. The benefits, risks, and possible complications of interventions such as pain control measures, route and type of narcotic analgesia, epidural anesthesia, planned cesarean delivery, and induced delivery must be discussed with mothers. Their informed choices are always respected.<sup>12,22,222,226,286,292,295–298</sup>
24. Midwives are the preferred providers for low-risk childbirth whenever possible, with one-on-one support being offered if feasible because midwifery continuity of care models have shown important benefits for the health of the mother, the baby, and delivery outcomes.<sup>201,206,231,293,299–302</sup>
25. Mothers are encouraged to choose the companion(s) of their choice during labor. A trained birth companion or doula is also allowed following the mother's wishes and the country/facility policies.<sup>12,204,225,231,293,299</sup> A nurturing environment will be provided during childbirth, and women will be allowed to choose their birthing position and the provision of light meals and refreshing drinks. Their preferences for movement and/or walking during labor (unless contraindicated for clinical reasons) and for wearing their own clothing will be respected whenever possible.<sup>225,231,294,303</sup>
26. Nonpharmacologic measures to relieve pain and facilitate labor, such as back massages, bouncing balls, hydrotherapy (warm showers or baths),<sup>304,305</sup> free ambulation, and other safe cultural methods of pain relief, are recommended for uncomplicated cephalic deliveries. All analgesic medications, their timing, and route are carefully selected and discussed with the mother to minimize risks to the health of the dyad and to breastfeeding.<sup>97,295,304,306–310</sup>
27. When relevant, upon admission if not antenatally, patients will be asked what pronouns they and their partners use and what terms for infant feeding and breast milk they use.<sup>81–84</sup> Their responses are communicated to all staff caring for the patient during handoffs, and by any other means to ensure that communication with the patient and partner is handled respectfully.

#### F. Immediate postpartum care

28. There is an evidence-based SSC procedure protocol for the implementation and supervision of SSC in the delivery room that guides staff practice. Immediate and uninterrupted SSC is offered and encouraged to all mothers and newborns, after vaginal and cesarean births, regardless of the feeding method chosen and including preterm and LBW infants, unless the health status of the mother and/or infant contraindicates it.<sup>12,13,43,48,49,178,181,188</sup> SSC benefits the health of the mother.<sup>311–314</sup> It improves the infant's cardiovascular stabilization and thermoregulation

after birth, decreases their risk of hyperthermia and hypoglycemia, and lessens infant stress (less crying, lower pain scores, and lower cortisol levels).<sup>313,315–318</sup> Immediate or early SSC protects infants of mothers with chronic stress or depressive symptoms.<sup>319</sup> It is safe and has been shown to decrease infant mortality in the first 28 days in LBW infants.<sup>188</sup> Practicing SSC results in higher frequency of breastfeeding initiation, exclusive breastfeeding, longer breastfeeding duration, and better infant breastfeeding ability.<sup>311–314,320–324</sup> Maternal Covid-19 infection is not a contraindication to SSC.<sup>316,325</sup> SSC has also been related to improved and shortened third stage of labor, less fatigue, and decreased levels of cortisol in the mother.<sup>16,313,314,320,321</sup> SSC improves mother–infant bonding and breastfeeding self-efficacy, and helps parents of preterm babies to embrace their roles as essential caregivers.<sup>182,323,326</sup>

- a. All well and alert newborns are placed immediately after birth, naked and prone on the mother's bare chest while she remains laid back in a semi-recumbent position. After being thoroughly dried (except hands), a diaper is placed (if the mother desires), and they are covered with a blanket to contain the mother's heat. The dyad and partner are allowed to bond while being carefully observed. Infants are left to experience the nine phases of skin-to-skin such as smelling, licking, resting, and crawling toward the nipple before latching spontaneously.<sup>327,328</sup>
- b. SSC is not interrupted for at least 60 minutes or longer if the mother wishes and/or if the infant needs more time to latch or to complete breastfeeding, unless required for medical reasons. If a delay or interruption of initial SSC is necessary, HCP will ensure that mother and infant receive SSC as soon as clinically possible. Time of initiation and end of SSC is documented in the medical record.<sup>43,49,123,180,188,321,322,328,329</sup>
- c. The room temperature in the birthing environment is set at 23°C–25°C (74°F–77°F). Light and noise are reduced to avoid interfering with the infant's innate reflexes.<sup>231,317,328,330</sup>
- d. Following a cesarean delivery, staff will facilitate SSC in the operating room, allowing early implementation of the practice for maximum benefit to mother and infant.<sup>16,50,123,288,291,311,312,322</sup> Use of transparent surgical drapes is encouraged, depending on availability, to offer the mother the possibility of visualizing her infant's birth and to increase her chances of having a positive birth experience.<sup>331</sup>
- e. Apgar scores are obtained with the infant in SSC. Because suction may unnecessarily damage the infant and interfere with breastfeeding initiation, oral, nasal, or tracheal suction are not done for babies who start to breathe on their own, even when meconium is present in the amniotic fluid.<sup>231,323</sup>
- f. Cord clamping is not performed until the cord has stopped pulsating, or at least 60 seconds following delivery, in both preterm and term



- infants. If the infant's instability requires premature cord clamping, the cord blood can be expressed or gently squeezed toward the infant. However, deferred cord clamping is preferred to milking for preterm neonates. Stem cells can be collected after cord clamping.<sup>332–335</sup>
- g. The infant's anthropometric measurements, intramuscular vitamin K administration, ophthalmic prophylaxis, and hepatitis B vaccine administration will be delayed until at least 1 hour after uninterrupted mother–infant contact or the first breastfeeding.<sup>327,329,336</sup>
  - h. Bathing the infant will be delayed for at least 24 hours.<sup>337–339</sup>
  - i. Immediate SSC with the father or partner is recommended only if the mother is not available.<sup>322</sup>
  - j. It is recommended that all newborns experience SSC with their mother as often as possible during the entire stay in the facility, and not only during the immediate postnatal period.<sup>178,181,340,341</sup>
29. All mothers and all newborns able to breastfeed, including LBW and preterm infants, are supported to do so as soon as possible, within the first hour of birth.<sup>13,43,188,195,263,342–345</sup>
    - a. If the infant does not latch spontaneously in the first hour, or at the request of the mother, help is offered to facilitate the first latch.<sup>51,342–345</sup>
    - b. Late preterm infants and early term infants are offered special help to ensure latch and adequate transfer of milk.<sup>49,92,160,195,346,347</sup>
  30. A protocol for close observation to detect and/or avoid sudden unexpected postnatal collapse (SUPC) or neonatal suffocation is implemented for all newborns during immediate SCC after birth.<sup>348–350</sup> The protocol includes:
    - a. Guidance for parents regarding how to safely position the baby in SSC, not leaving the mother alone, and continuously watching the newborn. It also includes safety instructions aimed at enabling parents to recognize signs of distress in the infant during the initial SSC period and how to act if any of these signs are observed.<sup>348–350</sup>
    - b. Guidance for HCP on:
      - i. how to offer information about SSC to parents prenatally, during labor, and after birth, developing and implementing strategies to best help, monitor, and counsel specific groups at risk such as mothers after a cesarean delivery, first-time mothers, very young mothers, mothers with obesity problems, and unaccompanied or weary mothers whose neonates are at higher risk of SUPC during initial SCC.<sup>350–352</sup>
      - c. Instructions for close monitoring as needed for preterm and LBW infants during SSC, KMC, breastfeeding, and rooming-in to diminish risk of SUPC.<sup>49,185,195,348</sup>
- breastfeeding. The assistance is skilled, timely, culturally competent, empathetic in its support of new parents, and free of judgment or bias.<sup>13,274,353,354</sup>
32. Community-based birth and breastfeeding workers, if available, will be considered part of the team supporting breastfeeding in the immediate postpartum period whenever possible.<sup>204,355,356</sup>
  33. HCP skilled in breastfeeding counseling will observe at least one or two feeds at the breast (after the very initial latch) and will look for signs of effective latch, position, and feeding. Information and training on laid-back, or biological nurturing position, will be offered to all mothers as it can reduce breastfeeding complications and nipple pain.<sup>357,358</sup> If everything goes well, they will not intervene. If problems present, the mother will first be gently shown how to improve the latch and position herself, and HCPs will avoid doing it for her. A hands-on approach can be used, after permission is granted, if effective latching is not achieved.<sup>359,360</sup>
  34. Mothers identified prenatally or soon after delivery as at risk for delayed secretory activation (lactogenesis II) (Table 5) are assigned to special and individualized help as deemed appropriate.<sup>13,88,90,123,256,257,267,363,364</sup> A feeding plan and close follow-up of the infant are offered during the stay and after discharge.<sup>88</sup>
  35. Trained HCP will observe and document at least one feed every shift and during each contact with the mother, whenever possible, until discharge. Positioning, latching, milk transfer, frequency and characteristics of the infant's output, jaundice, infant weight, and feeding problems are recorded in the clinical history.<sup>90,365</sup>
  36. Maternal laid-back position, also called biological nurturing, is explained and encouraged in the early postpartum period, but each mother is empowered to find her own most comfortable position.<sup>357,358</sup>
  37. Mothers and partners are enabled to recognize signs of correct positioning and latching, to identify effective sucking, swallowing, and milk transfer, and to optimize milk production.<sup>13,88,90,366,367</sup>
  38. HCP will address any breastfeeding problem (nipple pain, latch difficulties, insufficient milk supply), and referrals will be made to a lactation specialist whenever needed. To prevent early breastfeeding abandonment, management of the most common breastfeeding difficulties is discussed with every breastfeeding mother before discharge.<sup>13,90,368</sup>
  39. Breast milk hand-expression techniques will be described and demonstrated to all mothers during their stay. They and their families will be given information and reassurances that obtaining only a few milliliters is common during the first episodes of milk expression, and it is not a sign of low milk production.<sup>369–371</sup>
  40. Breast milk hand-expression techniques<sup>13,49,369,372</sup> will be described and demonstrated to all mothers during their stay, and as early as needed when:
    - a. newborns cannot breastfeed directly, or are not able to latch or to get colostrum through latch alone,
    - b. newborns are preterm, early term, sick, or LBW, or cannot latch effectively in the first 24 hours,

### G. Offering breastfeeding support

31. Every mother who has made an informed choice to breastfeed is offered as much help as needed with

TABLE 5. RISK FACTORS FOR DELAYED OR FAILED SECRETORY ACTIVATION (LACTOGENESIS II<sup>a</sup>) OR LOW MILK PRODUCTION

Maternal factors	Infant factors
Age over 35	Preterm birth (<37 weeks)
Primiparity	Ineffective or weak suck
Breast problems: insufficient glandular tissue, flat or inverted nipples tissue, history of breast surgery	Breastfeeding delayed >30 minutes after birth
Delivery problems: cesarean delivery; Sheehan's syndrome; retained placenta	Ankyloglossia
Depression or anxiety	Cleft lip/palate
Hormonal or medical problems: diabetes (gestational or type 1), gestational hypertension, polycystic ovary syndrome, overweight or obesity (prepregnancy BMI ≥ 25), thyroid dysfunction, theca lutein cyst	
Tobacco use	
Some drugs and medications which may cause low milk production	

<sup>a</sup>Delayed secretory activation, or Lactogenesis II, is defined as little or no maternal perception of breast fullness or leaking at least 72 hours post-birth.

Source: Farah et al. (2021)<sup>361</sup>; Miao et al. (2023).<sup>362</sup>

- c. newborns who, though being able to breastfeed, are at risk of hypoglycemia and would benefit from being supplemented with mother's colostrum on the first feedings after breastfeeding,
  - d. mother–infant separation is unavoidable,
  - e. mother is at risk for delayed lactogenesis II (secretory inactivation) (Table 5).
41. When frequent milk removal is likely to be required, the provision of a breast pump, in addition to hand expression, may be offered. If desired, the use of a breast pump will be shown and demonstrated to any mother. Gentle breast compression during breast pumping may help augment output.<sup>373–375</sup> If breastfeeding is not possible, pumping at least eight times per day to mimic infant feeding frequency is recommended.<sup>155,374</sup>
42. Enough staffing time is allocated to ensure that adequate supervision and help are possible for all new mothers and infants.<sup>13,90,376</sup>
43. Painful procedures in term infants, such as immunizations, vitamin K administration, or heel pricks, will be done while breastfeeding whenever possible, as it is the best method to soothe pain in the neonate.<sup>377</sup>

#### H. Breastfeeding support for preterm, low birthweight, and sick infants

44. This facility respects the right of every child to be accompanied by his/her family during hospitalization. It is also acknowledged that family-centered/integrated care and direct implication of parents in the care of their infant/s are essential to diminish toxic stress associated with NICU stays, and have positive effects on overall infant outcomes including breastfeeding.<sup>194,378</sup> Accordingly, together with other environmental and caring measures to diminish exposure to neonatal stress,<sup>176,194</sup> this facility offers individualized and family-centered care to all preterm, LBW, or sick neonates, supports families' direct implication in the care offered, and works proactively and continuously to promote parental presence and to reduce barriers that parents may face

- in being with their preterm on a long-term basis.<sup>49,173,177,193,194,379</sup>
45. KMC is offered and facilitated for all mothers and infants, to be practiced as soon as possible after birth, and as close to continuously as possible. For that purpose, adequate clothing (if needed) and space to lie in a semi-reclined laid-back position will be offered to mothers. They will also be enabled to hold their infants prone and naked between their breasts. Staff will facilitate feedings whenever the infant shows early feeding cues.<sup>23,49,143,181,184,188–192,195,380–382</sup>
46. Preterm infants may be able to root, latch, and suck from 27 weeks. However, ineffective breastfeeding is likely; thus, they are offered special help to ensure adequate latch and milk transfer.<sup>49,159</sup>
47. Every effort is made to offer these infants their mothers' own milk or, if that is unavailable, safe donor human milk, whenever they cannot get all they need through direct breastfeeding.<sup>145,146,178,383</sup> To that effect, mothers of preterm and LBW infants are helped to start expressing in the first 6 hours after birth and to do it frequently.<sup>158,159,373,384–386</sup> This facility promotes human milk donation to human milk banks, supports donors, and collaborates with the nearest human milk bank.<sup>159,166,387</sup>
48. Oropharyngeal application/administration of colostrum will be offered to all preterm babies who are unable to breastfeed as soon as it is available. It will be administered, whenever possible, every 4 hours, and for at least 8 days unless they are breastfed earlier.<sup>149,150</sup>
49. All mothers of preterm and LBW infants aiming to exclusively breastfeed are encouraged to breastfeed or express their breasts at least five times per day, with a goal of eight sessions per day, including at least one night session in 24 hours, and to keep pumping logs.<sup>49,156,159,384</sup>
- a. They are enabled to pump near their infants in the neonatal unit, after participating in KMC.<sup>154,155,159</sup> Privacy will be provided to those mothers who request it.
  - b. Guidance is offered to mothers on hand expression and usage of an electric breast pump (double

set-up is preferable if feasible).<sup>155,157,384,388</sup> Mothers are informed that by combining hand expression with electric pumping they may increase their milk production and the protein content of their milk.<sup>374</sup>

- c. Colostrum may be more easily obtained by hand expression, but mothers are encouraged to use a breast pump soon and frequently after the first few days, as this has been associated with higher milk volumes and milk coming to volume on day 14.<sup>156,157,159,388</sup>
  - d. Whenever mothers are discharged separated from their infants, they will be encouraged to continue hand expressing and/or pumping to continue providing their milk to their infant/s. This facility will facilitate the process as much as it can, and written and verbal instructions for proper storage and labeling of breast milk will be provided.<sup>49,159</sup>
50. Transition to direct breastfeeding will be supported before discharge. Breastfeeding and exclusive breastfeeding are promoted through the strategies mentioned above and by supporting nonnutritive sucking at the breast (preferable to pacifiers) and by providing oral-motor stimulation exercises.<sup>58,163,165</sup> Cups, supplemental systems at breast, or syringes will be preferred to offer supplements or expressed breast milk until infants can exclusively breastfeed.<sup>56,58–60</sup> Nipple shields are used with caution, as they may interfere with exclusive breastfeeding.<sup>164,389</sup>
  51. Dedicated, caring, and knowledgeable support is provided by staff to help mothers of preterm, small, and sick infants to achieve a positive and successful breastfeeding experience. Peer support is promoted and supported for these families.<sup>159,162,193</sup>

#### *I. Supporting exclusive breastfeeding*

52. Breastfeeding mothers are encouraged to exclusively breastfeed (meaning feeding only breast milk, no other liquids or solids except for vitamins/medications, glucose gel, or oral rehydration solutions). CMF supplements will only be offered when medically indicated or attending the mother's informed request. Medical decisions on the need for supplementation will be based on clinical assessment, and medical indications will be documented.<sup>4,13,89,390–392</sup>
53. If supplements are needed or requested:
  - a. The preferred order is: colostrum/MOM, donor human milk, CMF.<sup>13</sup> If needed, mothers will be encouraged to express colostrum/milk directly into their infant's mouth, as doing so minimizes the loss of milk or colostrum in transfer to and from a feeding device, and allows more direct contact between mother and infant.<sup>393</sup> Hydrolyzed formula can be considered for temporary use to prevent future cow's milk protein hypersensitivity in the infant if donor milk is not available and medically justified use of CMF in the immediate postpartum period is indicated.<sup>394</sup>

- b. Given reports of contamination of powdered infant CMF and that it may contain pathogenic bacteria,<sup>395</sup> premixed, ready-to-feed CMF is preferred to powdered CMF.<sup>396</sup> If powdered CMF is used, it should be prepared following WHO guidelines, which require boiling water and allowing it to cool slightly, but not below 70°C (158°F), adding the amount of CMF indicated on the product label in proportion to the water, and then cooling to a safe temperature for consumption.<sup>397</sup> Safe preparation, feeding, and storage of CMF will also be individually demonstrated, and written instructions will be given to families who do not breastfeed or require this type of supplementation at discharge. Families should be instructed that microwaves are not a suitable way to prepare powdered CMF. If bottled water is preferred to tap water (e.g., in case there are doubts about water quality),<sup>398</sup> the bottled water should be low in certain minerals, for example, fluoride,<sup>399,400</sup> free of added minerals or other components, and still requires boiling.<sup>401</sup>
- c. Supplements will preferably be given after breastfeeding (or during breastfeeding if using a tube attached to the mother's nipple). The volume of supplement will be only what the infant needs, considering the estimated volume that the infant ingests from breastfeeding. On the first days of life, term infants ingest: 4–6 mL/kg/day on day 1, 13–25 mL/kg/day on day 2, and 44–66 mL/kg/day on day 3, including what they ingest from breastfeeding, with the lower numbers representing cesarean births. For a 3.5 kg infant, this volume could be as low as 1.2 mL per feed on day 1 for an infant delivered by cesarean who feeds 12 times per day, to 2.6 mL per feed for an infant born vaginally who feeds 8 times per day. Volumes of feeds may vary throughout the day, and these figures are only averages.<sup>393,402</sup>
- d. Supplements will not be offered without a medical order, including those given at the mother's request. Orders given for medical indications require daily review and renewal. Medical indications for supplementation, type of supplement, times, amount, method of feeding the supplement, and instructions given to mothers regarding supplementation must be documented in the clinical record of mother and infant.<sup>13</sup> In cases of suboptimal intake, difficult latch, or poor milk removal (particularly if the infant is very fussy or lethargic), and a concern for dehydration, providing supplementation prior to breastfeeding could be indicated.<sup>89,393</sup>
- e. When mothers ask for supplementation that is not medically indicated, staff will actively listen and explore their reasons in a culturally sensitive manner<sup>403</sup> and will, afterward, provide a careful assessment of breastfeeding and discuss the risks of supplementing with mothers and, if appropriate, their family members.<sup>13,23,353,390,404</sup>



- f. If there is a medical indication for supplementation, mothers will be counseled and informed about the need for supplementation and the likelihood that it will be a temporary intervention to avoid undermining their breastfeeding self-efficacy, which is a major factor in unintentional early weaning.<sup>89,405,406</sup>
- g. If the mother's milk production or transfer is insufficient to meet her infant's needs, qualified HCP will help her ascertain the possible causes (see Table 5).<sup>361,362</sup> She will be instructed on hand expression techniques which may help her augment milk production. Hand expression is preferred over mechanical pumping in the first few days after birth when the volume expressed may be minimal and lost in the tubing.<sup>374</sup> Furthermore, overuse of mechanical pumping may cause harm.<sup>55</sup> When a mechanical pump is indicated, careful assessment of the appropriate pump, the dimensions of its flange, and general instructions to prevent pump trauma should be given. Expressing should be presented as a means to achieve the goal of adequate infant growth.<sup>89,370,373</sup> Combining hand expression during pumping ("hands-on pumping") may increase the caloric content of milk and promote growth, particularly for preterm infants.<sup>375</sup>

#### J. Avoiding mother–infant separation

54. In this facility, we recognize and facilitate the need for all mothers and healthy term infants to remain together 24 hours per day to the benefit of mother and infant, regardless of the mother's feeding choice or delivery method.<sup>13,21,50,393,407–410</sup>
  - a. Rooming-in is facilitated for all newborns, including late preterm infants and LBW >1,750 g who meet specific medical and safety criteria.<sup>13,92,411</sup>
  - b. If a mother needs care in a dedicated recovery unit, such as immediately following a cesarean delivery, the infant will accompany the mother in the same room. Assistance is offered if the mother requires it to lift her infant.<sup>13,43,322,343,412</sup>
55. Mother–infant separation during the stay in the maternity facility will only occur for medical indications.<sup>13</sup>
  - a. Documentation of these separations will be required, together with reasons for it, location of the infant/s, and time parameters while separated.
  - b. Rooming-in will be reinstated as soon as the reason ceases. In the meantime, the mother and/or family of sick or preterm infants will have unrestricted access to their infant in the NICU or Special Care Nursery.<sup>195</sup>
56. If mother–separation is unavoidable, and the mother's condition permits, the staff will support the mother to start expressing milk as soon as possible, at least 2 hours after the previous feed or in the first 6 hours after birth, and to continue doing it frequently, preferably at least 8 times in 24 hours, until they are reunited again.<sup>13,49,373,413</sup> Mothers will be provided with the appropriate pump and/or taught hand expression according to their pumping needs and hospital possibilities.<sup>414</sup>
57. If mothers and infant/s are separated without the possibility to visit, technology such as video conferencing will be used to assist with bonding, and motivation to express and to provide MOM.<sup>415</sup> Some potential reasons for temporary separation of mother and infant include active tuberculosis, active varicella (Table 2), and transfer of infant without mother.
58. Maternity beds fitted with sidecar bassinets facilitate mother and infant proximity and will be made available whenever possible, especially for post-cesarean dyads.<sup>343,416</sup>
59. All routine procedures, assessments, newborn screens, cardiac screens, immunizations, hearing screens, and routine laboratory draws shall be performed at the mother's bedside.<sup>13,43,417</sup>
  - a. Routine blood glucose monitoring of term healthy infants is not indicated.<sup>12,87,418</sup>
  - b. Infants who require intravenous antibiotics, have neonatal opioid withdrawal syndrome, or need phototherapy, but, are otherwise stable, are allowed to remain with the mother.<sup>73,419,420</sup>
60. Safe rooming-in practices are in place in the facility to prevent infant falls and suffocation incidents. Safe rooming-in practices include the availability of sidecars bassinets or strategic placement of standard bassinets, education on safe transfer of the infant, and frequent staff surveillance and accessibility. Increased surveillance is offered to mother–infant dyads at higher risk. Limiting visitors is encouraged when necessary to facilitate family rest.<sup>50,91,99,421</sup>
61. Whenever a mother requests that her infant be kept apart in the nursery, her reasons for such care are respectfully explored, and she will be counseled on the importance of rooming-in for both the mother's and the infant's health and well-being. This counseling will be documented. If the mother chooses to have the infant separated from her, the nurse caring for the infant is responsible for bringing the infant to the mother as soon as the infant displays early feeding cues, to support exclusive breastfeeding.<sup>13</sup>

#### K. Responsive feeding

62. Responsive feeding is recommended as opposed to fixed interval or scheduled feeding. Mothers and partners, regardless of delivery method or feeding choice, are offered information and enabled to recognize their infants' cues for feeding, including during the night, and the importance of offering responsive feeding. No restrictions are placed on the frequency or length of feeding by health care staff.<sup>13,393</sup>
63. Mothers and families will receive information to help them identify and follow their infants' early signs of hunger and satiety to enable them to offer the breast during the quiet alert state.<sup>422</sup>
64. They will be given anticipatory guidance regarding normal feeding patterns after delivery, normal timing of secretory activation, normal weight loss, and usual

weight gain trajectories in the first days of life.<sup>366,423–425</sup>

65. Mothers will be encouraged to offer their infants both breasts, at least early on, as there can be variability in milk volumes and composition of the left and right breast, and to identify whether the infant demands, or not, to feed from both breasts at one feed.<sup>426</sup>
66. Mothers and families are informed that infants will also show hunger cues during the night and that they need to be fed accordingly. Nighttime feeds are needed for infant's growth, and night feeding is important to ensure an adequate milk supply for the mother.<sup>99,427</sup>
67. Education on responsive feeding is offered to families including the following:
  - a. learning to identify hunger cues such as opening eyes, licking, hands to mouth, gurgling, cooing, and rooting.<sup>13,428,429</sup>
  - b. normal healthy term infants need to breastfeed about 8–12 times per 24 hours but not necessarily at regular intervals.<sup>425</sup>
  - c. sometimes infants may require frequent feedings. Cluster feedings (several feeds close together) are common in the first 24–36 hours and may stimulate breast milk production.<sup>425</sup> Supplementation is not indicated for cluster feeding unless there are other indicators of poor intake.<sup>89</sup>
  - d. nonnutritive suckling is a component of normal infant feeding behavior and self-regulation and should not be discouraged.<sup>89</sup>
  - e. LBW, preterm, or early term newborns need more frequent feeds but may be sleepy. Parents are informed of the need and how to awaken and feed the infant at early feeding cues so that the infant receives at least 8 feeds per 24 hours.<sup>92,159,162</sup>

#### L. Avoiding pacifiers and teats for breastfeeding infants

68. Pacifiers, artificial nipples, or teats will not be routinely used nor offered to healthy term breastfeeding infants.<sup>56,58–60,89,195,367,430</sup>
69. Breastfeeding is the preferred soothing method for any breastfed infant undergoing a painful procedure. When direct breastfeeding is not possible, provision of breast milk via dropper or an alternative feeding method is preferred. When breast milk is not available, other analgesic non-pharmacologic methods such as 25% dextrose/glucose solution, swaddling, parental containment, and a pacifier may be used for pain soothing during a procedure. If a pacifier is used in this capacity, it should be discarded after the procedure.<sup>377,431,432</sup>
70. If a mother requests that her infant be given a bottle, teat, or pacifier, HCP will explore reasons for the request, address concerns, and educate on the risks of their use, with emphasis on the effects on suckling at the breast,<sup>367</sup> and breastfeeding will be assessed to rule out breastfeeding difficulties.<sup>393</sup>
  - a. Mothers' informed decisions on bottle, teats, and/or pacifier use are honored, and information

about the use of artificial teats, bottle nipples, or pacifiers are documented in the medical record.<sup>13</sup>

- b. Bottles and artificial teats will be avoided. Evidence for avoiding bottles and artificial teats is strongest for infants who require multiple supplements.<sup>59,433</sup>
- c. Cup feeding is preferred as an alternative to bottles, compared with other methods, including finger, syringe, or paladai. Cups allow infants to control the pace of feeding and are associated with better breastfeeding outcomes. Cups also have an advantage where hygiene is a concern.<sup>56,58,60,61,89,434</sup>
- d. Supplementing via tubing at the nipple may help stimulate the mother's breast while feeding the infant and may also result in better breastfeeding outcomes in preterm infants.<sup>56,58,60,159</sup>
- e. When bottles are used, consider paced bottle-feeding, which is more physiologic.<sup>89,393</sup>
- f. Instructions will be given to mothers who need them regarding how to administer the supplement with the chosen alternative method, and this shall be documented in the clinical record.<sup>13</sup>
- g. Nipple shields will be used only on recommendation by a lactation specialist and after other attempts to correct the difficulty have failed.<sup>164,389,435</sup>

#### M. Continuum of care/going home

71. This facility ensures continuity of care and offers coordinated care with clear, comprehensible, and accurate conversations between mothers and families and relevant health and social care workers and peer groups in the community.<sup>21,23,121</sup>
  - a. Before discharge, the health care team will ensure that there is effective, pain-free breastfeeding. If the infant is still not latching or feeding well at the time of discharge, an individualized feeding plan will be devised and, depending on the dyad's clinical situation and resources, the infant's discharge may be delayed. Whenever needed, a visit specifically for following up on feeding issues will be arranged.<sup>436</sup>
  - b. If a mother needs to stay for any clinical reason, a healthy infant will not be discharged without her, unless per family desire or when the mother's condition advises so.<sup>436</sup>
  - c. The facility team will help ensure that continuity of care is guaranteed, either by follow-up visits (including home visits) or by providing contacts with qualified primary care providers, midwives, and/or lactation specialists.<sup>10,11,13,23,437–439</sup>
  - d. Home visits may be planned or arranged whenever possible, as they have demonstrated a positive influence on breastfeeding duration.<sup>10,11,90</sup>
  - e. Before leaving the hospital, HCP will make sure that mothers, their partners, and family have certain breastfeeding knowledge and skills (Table 6).<sup>13</sup> Written breastfeeding education material will be facilitated and discussed with them as deemed appropriate but will not

TABLE 6. LIST OF ESSENTIAL ISSUES THAT EVERY BREASTFEEDING MOTHER (AND FAMILY) SHOULD KNOW (TO BE VERIFIED WITH MOTHER BEFORE DISCHARGE)

1. The importance of breastfeeding exclusively and mother/parent–infant skin-to-skin contact while feeding.
2. Feeding cues and signs of an adequate latch, swallowing, milk transfer, and infant satisfaction, and how to recognize all of them.
3. The average feeding frequency (at least 8 times per 24 hours), with some infants needing more frequent feedings.
4. How to breastfeed in a comfortable position without pain. The importance of the laid-back position.
5. Infants should be fed in response to feeding cues, offered both breasts per feeding if needed, and fed until they seem satisfied.
6. How to ensure and enhance milk production and let-down.
  - Why and how to hand express colostrum/breast milk.
  - How to correctly use and care for a breast pump if pumping is needed.
7. The effects of pacifiers and artificial teats on breastfeeding and why to avoid them until lactation is established.
8. Information on medications or mother's illnesses that contraindicate breastfeeding.
  - User-friendly, accurate information resources such as [www.e-lactancia.org](http://www.e-lactancia.org)<sup>70</sup> and MommyMeds.<sup>440</sup>
  - Reasons for a breastfeeding mother to avoid tobacco, alcohol, and other drugs.
9. Signs of undernourishment or dehydration in the infant, and warning signs that indicate a need to contact a health professional<sup>441,442</sup>:
  - drowsy or very sleepy, frequent sleeping periods, usually not waking for more than 4 hours, or
  - always awake or irritable, or
  - never seeming satisfied, or
  - more than 12 feeds per day, or
  - no signs of swallowing after at least every three to four sucks, or
  - too few wet/heavy or soiled diapers per day, or
  - fever,
  - continued weight loss after day 4,
  - jaundice that reaches below knees.
10. Recognize signs of maternal physical and mental health issues that indicate a need to contact a direct health care provider:
  - persistent painful latch, or
  - breast lumps,
  - breast pain,
  - fever,
  - doubts about milk production,
  - aversion to the child,
  - profound sadness,
  - any doubt about breastfeeding self-efficacy.

substitute person-centered, proactive personal support. Partners and other significant family members, per mothers' wishes, will be included in educational and information activities, including mHealth interventions.<sup>274,275,443–446</sup>

- f. The facility will ensure that mothers and partners of infants who are CMF-fed have appropriate personalized information and support at discharge, that they know how to safely prepare, feed, and store CMF, and that they have received oral and written instruction in this regard.<sup>13,401,447</sup>

72. This facility collaborates with community-based programs to coordinate breastfeeding messages and offer continuity of care.

- a. Prior to discharge, all dyads are provided with contact information for local support groups or other community resources that provide breastfeeding support.<sup>10,23,439,448</sup>
- b. A first visit will be facilitated with an appropriate provider(s) (pediatrician, family physician, midwife, nurse, IBCLC, or other qualified HCP) for a formal evaluation in the first 48–72 hours after discharge,<sup>449</sup> to assess the infant's general well-being, breastfeeding performance, assessment of jaundice, and age-appropriate nourishment and hydration.<sup>4,13,367,438,439,450</sup>

- c. Families receive information about the range of help available to them in the community so that they can easily access available resources. Special care is devoted to finding resources that are culturally and linguistically appropriate.<sup>448</sup>
- d. Contact with local peer support groups is encouraged and facilitated.<sup>23,451,452</sup>

#### N. Additional considerations

73. This facility uses evidence-based sources for safe use of medication and radiologic agents with lactating mothers such as LactMed,<sup>453</sup> InfantRisk,<sup>69</sup> the Lactation Study Center,<sup>454</sup> or E-lactancia.<sup>70</sup>
74. Pharmacologic treatment will not be offered routinely to inhibit lactation. Non-pharmacologic measures such as ice and mild analgesics to alleviate discomfort, hand expression to comfort, and breast support to avoid engorgement are advised.<sup>455</sup> In mothers where inhibition of lactation may be necessary for medical or psychological reasons (e.g., fetal demise or stillbirth), cabergoline may be used after informed decision-making.<sup>456</sup>
75. This facility will use evidence-based sources to guide the care of mothers with perinatal infections and any other medical condition that indicates



hospital admission, to ensure that there is no unnecessary separation of mother and infant, and that breastfeeding can continue if it is not contraindicated. See ABM Protocol 35<sup>98</sup> and Table 2.

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Content of this protocol is up to date at the time of publication. Evidence-based revisions are made within 5 years if there are significant changes in the evidence.

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