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Improving the uptake of the Baby Friendly Health Initiative in Australian hospitals

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Key messages

- Breastfeeding is a normal biological process and protects the health and well-being of mothers and babies. Yet breastfeeding continues to be undervalued by society and in Australia, women face multiple barriers to breastfeeding in the home, community, health care system and workforce.

- The Baby Friendly Hospital Initiative (BFHI), developed by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), in 1991, was designed to ensure that mothers receive adequate support to initiate breastfeeding and to continue doing so after discharge from the acute care service. In 1995, UNICEF passed the governance within Australia to the Australian College of Midwives (ACM) where it remains today.

- While the BFHI has been shown to improve the wellbeing of mothers and significantly increase the duration of breastfeeding, as of 2020, only 26% of Australian public hospitals have active Baby Friendly accreditation. The low rates of current accreditation have generally been attributed to the overall low priority that governments, hospitals and the community place on breastfeeding, and could be improved by:

    - Investment in evidence based, free-from-commercial-interest education and support for breastfeeding mothers and family.
    - In-hospital training and preservice education aimed at increasing awareness and clinical knowledge of breastfeeding for best practice, and which are appropriately funded by government.
    - Integrating BFHI standards to national accreditation standards, and ensuring these are independent of influence from formula companies and their affiliates.
    - Continued support for breastfeeding policies in the workplace and community.
    - Supporting holistic relationally-based culturally-sensitive breastfeeding programs within primary health care.
    - Examining international models of BFHI implementation for feasibility of use in Australia.

Executive summary

Breastfeeding, also known as biological infant feeding, benefits infant and maternal health, as well as the economy. Yet, global exclusive breastfeeding rates continue to sit at only around 41%.

In 1989, the WHO launched a recommended framework for maternity services to provide adequate support for breastfeeding mother called the 'Ten Steps to Successful Breastfeeding'. In 1991, the WHO launched Baby Friendly Hospital Initiative (BFHI), a guidance to help maternity services with implementation of the standards and encouragement, by way of a globally recognised accreditation to stimulate its uptake. This implementation guidance was then revised in 2018 with minor changes, shifting the focus to enabling women and their families.

The BFHI is positively associated with an increase breastfeeding initiation and duration, however, as of 2020, only 26% of Australian hospitals are baby-friendly accredited.

Globally, barriers to implementing the BFHI include resistance to change by hospital staff, lack of ownership by medical staff and lack of sustainable funding. In Australia, the BFHI has not been implemented at scale. The 2019 Australian National Breastfeeding Strategy identified the BFHI as a priority area.

BFHI awareness can be improved by providing in-hospital training and preservice education, and by reducing the influence of companies that do not meet their obligations under the international code of marketing breastmilk substitutes.

Investigating the potential to link the BFHI to National Safety and Quality Health Service Standards may also address funding limitations and encourage hospitals to achieve BFHI accreditation standards.

1 Introduction

Breastfeeding is the normal biological process of infant feeding and optimises infant and maternal health; with flow on effects to the economic wealth of families, the national economy and the environment. Despite these known benefits to society, the rate of breastfeeding in Australia remains unknown, meaning that many of the positive impacts of breastfeeding are unnoticed or undervalued, with women continuing to face multiple barriers to breastfeeding in the home, community, health care system and workforce.

Breastfeeding is a human rights issue, as it provides for a child's basic human right to be well nourished. In addition, women have the right to accurate and unbiased information to make an informed decision regarding breastfeeding (United Nations Human Rights). Governments have an obligation to respect, protect and fulfil children's rights under the Convention on the Rights of the Child and other relevant UN human rights (Grummer-Strawn et al., 2017).

In 1989, the World Health Organisation (WHO) and the United Nations International Children's Emergency Fund (UNICEF) published The Ten Steps to Successful Breastfeeding policy (herein referred to as the 'Ten Steps') to provide guidance for maternity services delivering the best start for every infant, and the necessary education and help for mothers both to successfully initiate breastfeeding and to continue doing so after hospital discharge.

In 1991, WHO and UNICEF launched the Baby Friendly Hospital Initiative (BFHI), which is a global initiative designed to protect and support mothers to initiate and continue breastfeeding through education and care support (World Health Organization, 2018a). Through external assessment, BFHI status is awarded to hospitals that demonstrate that they have met the required criteria that meets the Ten Steps to Successful Breastfeeding (Ten Steps); while remaining independent from companies and their affiliates who do not meet their obligations under the International Code (World Health Organization, 2018a). UNICEF Australia passed governance of BFHI within Australia to Australian College of Midwives in 1995, where it remains 25 years later (Australian College of Midwives, 2018).

In 2006, the Baby Friendly Hospital Initiative became the Baby Friendly *Health* Initiative in order to more accurately reflect the expansion of the initiative into community health facilities (Australian College of Midwives, 2018). Subsequently, for consistency, the BFHI will be referred to the as the Baby Friendly Health Initiative across the Brief.

In 2018, WHO revised the Ten Steps (World Health Organization and Unicef, 2018). Revisions are subtle, but meaningful for implementation (see Appendix 1). For example, the Ten Steps shifted the focus from health care staff to parents and families (Pramono et al., 2019). This shift empowers and enables women and families to make decisions regarding feeding method based on information free-of-influence information.

In 2019, in order to improve national monitoring of breastfeeding rates, including through BFHI accreditation, the Australian Government published the National Breastfeeding Strategy 2019 (COAG

Health Council, 2019). However, given that the cumulative total of Australian hospitals accredited for the BHFI since 1995 is unknown, and in 2020 only 26% of Australian public hospitals were actively accredited for the BFHI (Baby Friendly Health Initiative Australia, 2020), the details as to why hospitals relinquish accreditation is worthy of further investigation.

2 Benefits and Barriers of Breastfeeding

2.1 Benefits of Breastfeeding

2.1.1 Physical

The WHO recommends initiation of breastfeeding within an hour of birth, only giving breastmilk to baby from birth until six months of life (known as exclusive breastfeeding), and breastfeeding with complementary foods for two or more years (World Health Organization, 2020).

Research shows that children who are not breastfed have, among other things, higher rates of obesity, malocclusion (misalignment of teeth when jaws are closed), asthma and lower intelligence quotients. Infants that are breastfed for more than 6 months have lower risk of developing attention-deficit/hyperactivity disorder and lower risk of being diagnosed with autism spectrum disorder (Bar et al., 2016). Breastfeeding more than 12 months reduces the risk of breast and ovarian cancer by 26% and 37%, respectively, as well as 32% lower risk of diabetes type 2 (Chowdhury et al., 2015)

Breastfeeding can also protect babies from diarrhoea, lower respiratory infection, otitis media, bacteraemia, bacterial meningitis, botulism, urinary tract infection and necrotising enterocolitis (NEC) (Smith et al., 2002) both in high- and low-income countries, especially in vulnerable populations, such as in Indigenous people.

In high-income countries like Australia, breastfeeding reduces the risk of sudden infant deaths by more than a third (Victora and Rollins, 2016).

Non-breastfeeding mothers have an increased risk of ovarian cancer, breast cancer, type 2 diabetes and osteoporosis (Victora et al., 2016).

2.1.2 Economics of breastfeeding

Breastfeeding could save global health system treatment costs of US$1.1 billion annually and US$53.7 billion in future lost earnings each year due to premature child and women's mortality (Walters et al., 2019). Cognitive losses alone are estimated to equal US$285.4 billion annually (Walters et al., 2019). Aggregating these costs, the total global economic losses are estimated to be US$341.3 billion, or 0.70% of global gross national income (Walters et al., 2019).

In 2007, it was estimated that the value of breast milk produced by Australian women was around $2 billion per year (Standing Committee on Health and Ageing, 2007). Earlier data from the Australian Capital Territory, showed that early weaning may add between around A$1 and A$2 million annually to hospitalisation costs (Smith et al., 2002).

Contemporary national cost estimates are unknown, yet the benefits of increasing the breastfeeding rate in Australia would likely improve health outcomes and contribute to the sustainability of health system in Australia.

2.2 Barriers to Breastfeeding

On an individual, group and society level (Hector et al., 2005), there are many factors that motivate, or demotivates mothers to breastfeed. However, while breastfeeding and breastmilk is free to the consumer, it does not mean that it is free in terms of how a mother may breastfeed successfully. It requires skill, effort and time. Many women feel unsupported to breastfeed by their families, the community, their workplaces and the health system; and consider formula as a good breastmilk substitute and as an instant solution to their breastfeeding problems.

Structural impediments, such as lack of support from medical staff, economic barriers or employment issues may negatively impact a mother's decision to breastfeed (Bronson, 2017). For example, a mother's educational background (Holowko et al., 2016), knowledge about breastfeeding, intention to breastfeed, parenting skills and birth experience, health and risk status of mother and infant, and nature of early interaction between mother and infant can affect an individual's ability to successfully breastfeed (Figure 1).

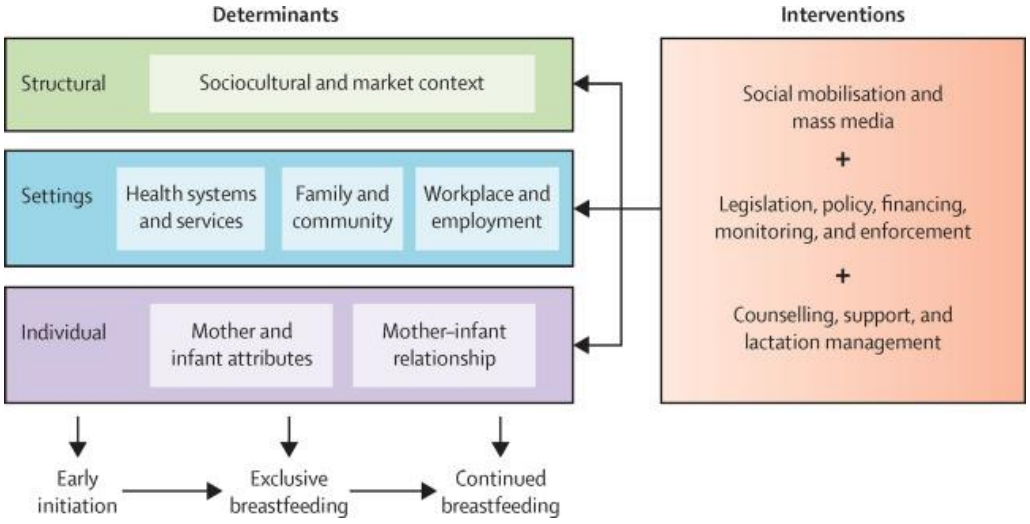


Figure 1: Conceptual framework of factors affecting breastfeeding practices (Rollins et al., 2016)

Women may not receive adequate information regarding breastfeeding to make an informed decision about whether to breastfeed (Unger, 2020). The formula industry may influence this decision since marketing by companies is known to impact a woman's confidence in her ability to breastfeed (Parry et al., 2013).

A lack of knowledge about breastfeeding and awareness of the importance of breastfeeding by some health professionals takes part in this phenomenon. This is further exacerbated by the influence of formula marketing on health professionals and associated conflict of interest (Wright and Waterston, 2006, Gavine et al., 2016, Blixt et al., 2019). This could include, for example, producing and distributing information on breastfeeding via collateral produced by formula companies.

2.2.1 Partner and Family

A positive and encouraging attitude from a breastfeeding mother's partner and family is associated with an increase in the period of time that a mother continues to breastfeed (Rempel et al., 2017). The first few weeks after a baby's birth is a crucial time to establish a breastfeeding relationship (Bonyata, 2018). Physical discomfort and emotional distresss can affect the release of the hormone oxytocin, which is responsible for the milk ejection reflex during a feed. Milk production can be temporarily compromised over time when a mother is repeatedly exposed to stress, and disrupted and inadequate milk removal. (Dewey, 2001).

Unsupported mothers, or mothers who are uneducated about breastfeeding, are more susceptible to misleading information and myths about breastfeeding, which in turn, can hinder the breastfeeding process. Research from Nepal has shown that a mother's educational background is associated with higher early initiation of breastfeeding (Acharya and Khanal, 2015). A similar correlation has been found in Australia, with university-educated woman twice as likely to breastfeed for the first six months of their baby's life than non-tertiary-educated women (Holowko et al., 2016). This finding emphasises the need for the Commonwealth, state and territory governments to invest in better education and support surrounding breastfeeding (Noon, 2016).

2.2.2 Maternity facilities

The first few hours and days of an infant's life are a critical period for establishing lactation and providing mothers with the support they need to breastfeed successfully. During this period, health professionals may knowingly, or unknowingly, carry out actions that interfere with the initiation of breastfeeding.

Actions may include:

- the separation of the mother and infant;
- delayed initiation of breastfeeding;
- provision of pre-lacteal feeds; and
- unnecessary supplementation which significantly increases the risk of breastfeeding challenges leading to early cessation of breastfeeding (World Health Organization and Unicef, 2018).

Not all health professionals (including midwifery students, medical students and other health professionals' students) feel prepared, confident and knowledgeable in managing breastfeeding problems (Yang et al., 2018). For example, new mothers at a hospital in the United States were encouraged to breastfeed, but were also given formula supplementation in the hospital and formula

to take home (Declercq et al., 2007). Mothers whose babies receive in-hospital supplementation tend to have lower self-efficacy (Hinic, 2016), which in turn affects the length of time a mother continues to breastfeed following discharge from hospital.

Health professionals may also be influenced by the provision of free formula samples and funding for training, conferences and seminars; activities which have been shown to negatively affect breastfeeding practice (Piwoz and Huffman, 2015a). New parents should receive evidence-based information on breastfeeding, and support to breastfeed, and must be protected from commercial interests that negatively impact on breastfeeding (World Health Organization and Unicef, 2018).

2.2.3 Workplace

Lack of support for a breastfeeding mother by their family, poor or no paid parental leave, unpaid lactation breaks and an absence of appropriate lactation facilities are known to prevent women from continuing to breastfeed once they return to work (Mirkovic et al., 2016). These obstructions can occur as a consequence of:

- an organisation's or workplace's inability to recognise the benefits of supporting breastfeeding mothers to return to work (Smith et al., 2013), and/or
- a workplace's financial ability to provide adequate lactation facilities or affordable, breastfeeding-friendly childcare (Javanparast et al., 2013, Taylor et al., 2020).

Companies with breastfeeding support programs have a 94% staff retention rate and improved employees' morale, work satisfaction and productivity (Carter, 2019, Jantzer et al., 2018), as well as reduced absenteeism due to breastfed babies experiencing fewer health conditions (Smith et al., 2013).

Supporting parents at work is a requirement for achieving optimal breastfeeding, in addition to distributing the burden of care more evenly between parents and transforming social norms. Parent-friendly policies, which enables women to remain and progress in paid employment, and encourage men to share the work of caring for a baby or infant, are crucial to achieving gender equality at work and at home (World Health Organization, 2019).

2.2.4 Formula companies and affiliates

Infant formula marketing has been shown to contribute to the declining breastfeeding rates around the world (Flaherman et al., 2019). The International Code of Marketing of Breastmilk Substitutes (the Code) including all subsequent World Health Assembly resolutions, aims to protect and promote breastfeeding by ensuring appropriate marketing and distribution of breastmilk substitutes (World Health Organization, 1981). The Code applies to all breastmilk substitutes, whether marketed as partial or full replacement for breastmilk. This includes infant formula, other milk products, cereals, vegetable mixes, juices, baby teas and follow-up milks for feeding infants and young children up to the age of three years of age (World Health Organization, 2018b). The Code also applies to feeding bottles and nipples (teats), and to producers or distributors of products, and their parent or subsidiary companies.

The Code aims to protect the community from biased and unethical marketing by the industry that may potentially mislead the general community and undermine the role of breastfeeding. The Code itself is not legally binding, unless governments enact it to their legislation (World Health Organization, 1981) (Figure 2).

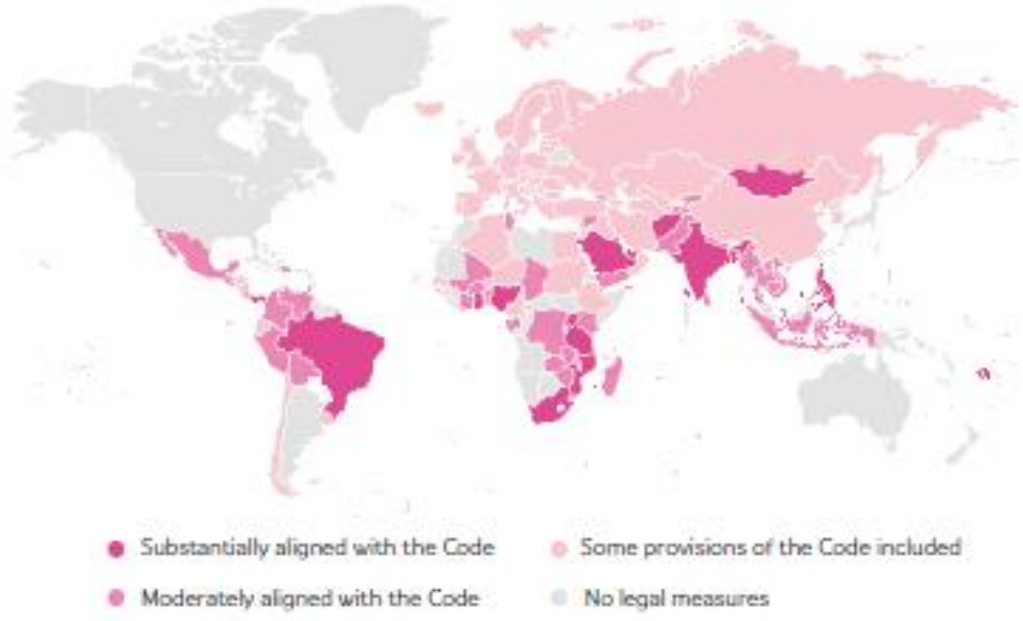


Figure 2. National Legal Status of The Code (World Health Organization, 2020)

In Australia, the Marketing in Australia of Infant Formulas: Manufacturers and Importers Agreement (MAIF Agreement) is the singular mechanism used to oversee the Code implementation.

The MAIF Agreement

The MAIF agreement has been operating in Australia since 1992 (Australian Government Department of Health, 2019). However, the MAIF only applies to infant and follow-on formula for children aged 0-12 months; compared to the Code that applies to infant and young child food aged 0-36 months (Australian Government Department of Health, 2019, World Health Organization, 2017a). The MAIF Agreement is voluntary and not all companies operating within Australia are signatories. Those companies who are signatories may be reported for breaches of the Code, if so determined by a complaints committee.

Signatories to the MAIF Agreement in 2020 include: Abbott Australasia, Aspen Nutritionals, Australian Dairy Park, Bayer Australia, Freedom Foods Group Trading, H&H Group, H J Heinz Company Australia, The Infant Food Co., Saputo Dairy Australia, Nature One Dairy, Nestlé Australia, Nuchev, Nutricia Australia, The a2 Milk Company, Wattle Health Australia, and RB.

Prior to 2014, the regulatory body responsible for enforcing breaches of the Code in Australian was the Department of Health's Advisory Panel to the Marketing in Australia of Infant Formulas (APMAIF). However, APMAIF had no remit to impose penalties and could only recommend remedial steps to rectify breaches of the code. Breaches were also tabled in Parliament as part of the publicly available APMAIF annual report (Australian Government Department of Health, 2019).

From 2014 to 2017, complaints were handled by an Independent Tribunal, overseen by the Ethics Centre (Nous Group, 2017); and since 2018, complaints from individuals, members of industry and consumer groups have been directed to the MAIF Complaints Committee, which is managed by the Australian Government Department of Health (Australian Government Department of Health, 2019).

While formula companies are required by law to publicly state a rhetorical commitment to breastfeeding, they are in fact, designed to profit from its failure (Wright and Waterston, 2006). The promotion of formula by health professionals as scientific and safe, has been shown to enhance product credibility and sales (Wright and Waterston, 2006). In Australia, there are no laws that regulate formula promotion, only a voluntary agreement between formula companies and government that prohibits the signatories from promoting their products for babies under twelve months of age (Australian Competition & Consumer Commission, 2016).

Companies can instead promote follow-up milk or toddler milk, which are considered unnecessary for healthy infants (World health Organization and UNICEF, 2018, World Health Organization, 2019). Toddler formula products are nearly identical to infant formula products, and research has shown that Australian mothers do not draw distinction between the two, referring to both as 'formula'. Consequently, breastfeeding mothers are likely unconsciously and uncritically accepting advertisers' claims around the health benefits of formula (Berry et al., 2012) and failing to acknowledge the health risks associated with formula feeding (Radzyminski and Callister, 2016).

Despite the adverse impacts that formula feeding can have on the health of babies and their mothers, particularly in low-income countries and populations, (Kent, 2015), infant formula has a role for many vulnerable populations with specific health needs (World Health Organization and UNICEF, 2009).

Acceptable medical reasons for use of breast-milk substitutes (World Health Organization and UNICEF, 2009)

- **Infants who should not receive breastmilk or any other milk except specialized formula**
  infants with galactosemia, maple syrup urine disease and phenylketonuria;

- **Infants for whom breastmilk remains the best feeding option but who may need other food in addition to breastmilk for a limited period**
  very low birth weight, very pre-term and risk of hypoglycaemia if their blood sugar fails to respond to optimal breastfeeding or breast-milk feeding.

- **Maternal conditions that may justify permanent avoidance of breastfeeding**
  HIV infection

- **Maternal conditions that may justify temporary avoidance of breastfeeding**
  severe illness, Herpes Simplex Virus type 1 (HSV-1)

- **Maternal conditions during which breastfeeding can continue, although health problems may be of concern**
  sedating psychotherapeutic drugs, anti-epileptic drugs and opioids use, radioactive iodine-131, excessive use of topical iodine, cytotoxic chemotherapy

2.2.5 Community

In Australia, the social stigma associated with breastfeeding in public is considered a major challenge by mothers who wish to maintain breastfeeding (Sheehan et al., 2019). For example, an earlier Australian study found that 82% of 2000 breastfeeding mothers agreed that bottle feeding is more acceptable in public than breastfeeding, and 48% agreed that men are bothered by breastfeeding in public (McIntyre et al., 2001).

In New Zealand, women who feel uncomfortable about breastfeeding in public due to social stigma or belief, are more likely to stop or avoid breastfeeding in public, than they would otherwise (Huang et al., 2018).

2.3 Impact of the BFHI

Internationally, the integration of the BFHI into care delivery increases rates of breastfeeding initiation (Saadeh, 2012), promotes early initiation and exclusive breastfeeding at discharge, exclusive breastfeeding at 6 months and increased rates of breastfeeding at 12 months (Perez-Escamilla et al., 2016).

Where the BFHI is implemented there is also:

- a significant decrease of in-hospital supplementation for breastfeeding babies,
- a decrease in the overall rate of premature breastfeeding cessation,
- an increase in the median duration of breastfeeding (from 8 to 12.5 weeks) and
- an increase in the overall duration of breastfeeding following implementation of the Ten Steps program (Tarrant et al., 2015).

Implementation of the BFHI is associated with improved in-hospital and post-discharge breastfeeding outcomes (Pan American Health Organization and World Health Organization, 2016), increased self-efficacy and satisfaction for mothers, as well as quality improvement and work satisfaction for healthcare staff (Otsuka et al., 2014, Grossniklaus et al., 2017). The BFHI has shown to be a cost-effective way to promote breastfeeding and reduce neonatal mortality (Silva et al., 2020).

While many international findings have been contemplated in the Australian context (Atchan et al., 2013), it remains difficult to examine the direct impact of BFHI in Australia due to the low numbers of hospitals currently accredited for the BFHI. Information on attitudes to breastfeeding in the home, workplace and community are also needed.

3 Implementation of the BHFI in Australia

In principal, Australia supports breastfeeding practices that improve maternal and child health (National Breastfeeding Strategy; Figure 3) (COAG, 2019). As a member state of the WHO and a founding member of the UN, Australia has adopted or endorsed several actions[1] including the BFHI to protect, promote and support breastfeeding as a human right.

Despite Australia's formal commitment to protect breastfeeding through the BFHI, its implementation has not been prioritised in practice. For example, government data on the number of baby-friendly accredited hospitals is lacking, the BFHI accreditation process itself is absent from the National Safety and Quality Health Service Standards and the economic benefits of breastfeeding have not been explored (International Baby Food Action Network (IBFAN), 2018). Cultural and organizational obstacles (Schmied et al., 2014), intangible government support, suboptimal capacity building to implement the BFHI (Atchan et al., 2018, Schmied et al., 2014) may also contribute to this phenomenon.

[1] Development of The International Code of Marketing of Breastmilk Substitute, Convention on the Elimination of All Forms of Discrimination Against Women, Conventions on the Rights of the Child, endorsement of the Innocenti Declaration, development of the Global Strategy on Infant and Young Child Feeding and the subsequent World Health Assembly (WHA) resolutions)

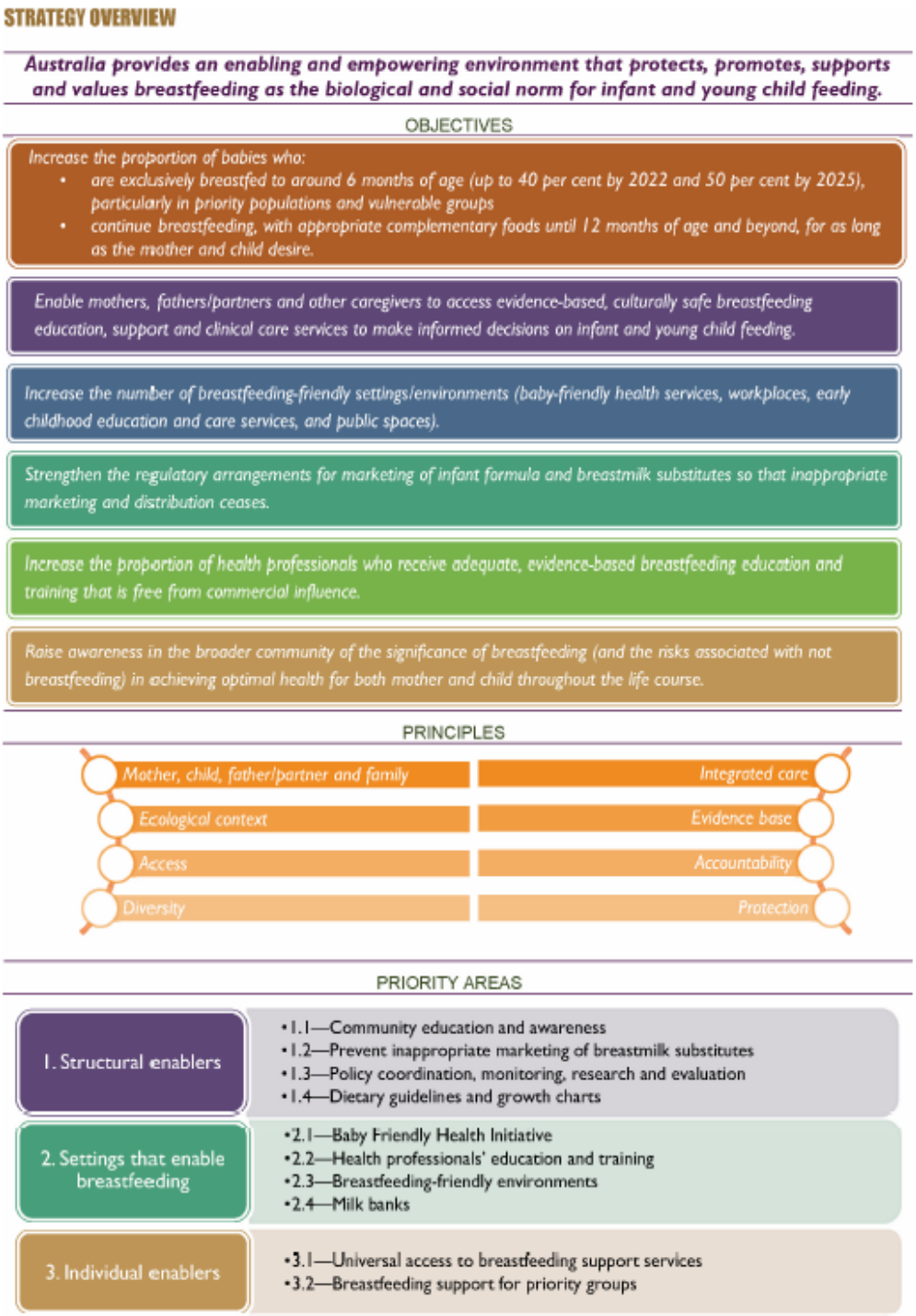


Figure 3. Australian National Breastfeeding Strategy 2019.

3.1.1 Australian policies supporting BFHI

The Australian government supports breastfeeding through several national guidelines. These include, for example:

- the Clinical Practice Guidelines: Pregnancy Care (Australian Government Department of Health, 2018), and the
- Australian Dietary Guidelines (Australian Government et al., 2013).

All states and territories provide guidelines for breastfeeding support and practices in health services, which include support for the BFHI, for example:

- the Victorian Maternal and Child Health Service Guidelines (State of Victoria Department of Health and Human Services, 2019), and
- the Western Australia Health Service Maternal and Newborn Care Strategy (Western Australia Country Health Service, 2018).

Support for BFHI implementation and accreditation

- In 2001, the Quality Improvement Council (QIC), Australian Council on Healthcare Standards (ACHS) and Australian College of Midwives (ACM) developed a national, outcome-focused standards module for antenatal and postnatal care addressing the continuum of care from the hospital to community health care settings, taking into account inter-sectoral linkages. The Guideline for Maternal and Infant Care Services was also developed as part of this project but was subsequently rescinded (Commonwealth Department of Health and Aged Care, 2001).
- In 2007, the House of Representatives Standing Committee on Health and Ageing recommended that all public hospitals be accredited as baby-friendly with the BFHI considered as the right pathway to eliminate hospital practices that might interfere with breastfeeding initiation and continuity. It was further recommended, to ensure its sustainability, that the BFHI be integrated into the national accreditation standards (Standing Committee on Health and Ageing, 2007).
- In the 2010 Implementation Plan for the Australian National Breastfeeding Strategy 2010-2015, the Australian government agreed to support the BFHI and raise the issue of BFHI accreditation with the Australian Council on Healthcare Standards (ACHS) (Australian Health Ministers' Conference, 2010). The Final Progress Report noted the Australian Health Minister's Advisory Council's (AHMAC) encouragement for all public and private hospitals to implement the ten steps to successful breastfeeding and to work towards or to maintain their BFHI accreditation.
- The 2019 Australian National Breastfeeding Strategy, recommended that the BFHI be implemented in a higher proportion of hospitals and community health services by encouraging more maternity hospitals and community health services to achieve accreditation. It was also recommended that the commonwealth, states and territories work with the ACM and the ACSQHC to facilitate BFHI accreditation in these settings (COAG Health Council, 2019).

Despite this repeated acknowledgement over the last decade that the BFHI remains a significant program for supporting breastfeeding success, tangible progress for improving its implementation remains slow.

3.1.2 The stakeholder perspective

In 2006, concern from government, the community and individuals around the fact that babies who were not being breastfed to the recommended six months were missing out on the scientifically proven short and long-term health benefits associated with breastfeeding, led to the House of Representatives Standing Committee on Health and Ageing Inquiry into Breastfeeding being established. Around 450 individuals and organisations made submissions to the inquiry (Standing Committee on Health and Ageing, 2007) and representative samples of submission statements calling for improvements in Australia's breastfeeding programs are as follows:

Stakeholders	Submission statements
Health Professionals	• Pharmacists are ideally placed to support breastfeeding in the community and to promote best practice in breastfeeding (The Pharmacy Guild of Australia, Pharmaceutical Society of Australia). • Lactation Consultants are provided access to Medicare Provider Number (Australian Lactation Consultants Association, College of Lactation Consultants Australia) • Funding to support a lactation support program in every hospital (Network of Australian Lactation Colleges) • National monitoring system of breastfeeding needs to be established (Dietitians Association of Australia)
Health services	• Endorse and promote BFHI within health services with funding required to implement it and all staff in contact with breastfeeding mothers should have education in BFHI principles and practices (Royal Children's Hospital-Melbourne, Gippsland Women's Health Services).
Government	• Provide legislation to protect mothers from unlawful discrimination in public life on the grounds of breastfeeding in all jurisdictions to provide legal recourse to breastfeeding mothers (Government of South Australia, Government of Tasmania, and Government of New South Wales). • Public policies to limit the marketing breastmilk substitutes in hospital to ensure that the decision to breastfeed is not undermined by, for example, mothers being given hospital discharge packs of infant formula (Government of New South Wales).
Non-government organizations	• National breastfeeding coordinator of appropriate authority needs to be appointed (Uniting Church in Australia-Synod of Victoria and Tasmania) • Establishment of multi-sectoral national breastfeeding committee consists of representatives from relevant government department, NGO and health professional association (Uniting Church in Australia-Synod of Victoria and Tasmania)

	• On-going social marketing campaign about breastfeeding and improved health outcomes (Australian Breastfeeding Association-NSW Branch)
Industry	• Strongly supports efforts to increase breastfeeding rates, in the same time, support mothers who decide not to breastfeed (Infant Formula Manufacturers Association of Australia[2]).

In 2008, in response to the inquiry, the Australian Government published the Best Start Report (Australian Government, 2008). The Report noted the recommendation to fund the ACM to improve implementation of the BFHI, following consideration of the outcomes of the Government's Maternity Services Review. Within the broader objectives of quality assurance and transparency, the report also examined the need to integrate the BFHI into the National Safety and Quality Health Service Standards. This commitment to ensure that BFHI measurements are incorporated into national standards has not been met, nor has funding of the ACM to administer BFHI

3.1.3 Aboriginal and Torres Strait Islander Community

Both the early initiation of breastfeeding and exclusive breastfeeding is associated with a reduced risk of neonatal and post neonatal mortality (Debes et al., 2013). In Australia, infant and child mortality rates are higher for Aboriginal and Torres Strait Islander Peoples than in non-Indigenous children (Australian Institute of Health and Welfare, 2018). In addition, Aboriginal and Torres Strait Islander children are 2.1 times as likely as non-Indigenous children to die before the age of 5 (Australian Institute of Health and Welfare, 2018). Therefore, ensuring that breastfeeding is encouraged, promoted and supported in Indigenous populations is critical to improving infant and children health.

However, despite the known health benefits of breastfeeding, Aboriginal and Torres Strait Islander women are less likely to breastfeed their babies compared to non-indigenous women (McLachlan et al., 2017). Furthermore, the rate of breastfeeding is decreasing (Australian Institute of Health and Welfare, 2014), although the incidence varies depending on whether the setting is rural, remote or urban. This decrease has been attributed to the lack of professional support services, such as lactation consultants in rural areas and changes in social structures, such as a lack of extended family support to those who are socially isolated (Standing Committee on Health and Ageing, 2007). Culturally appropriate Indigenous health programs in Australia delivered within holistic primary health care services controlled by Indigenous organisations should be supported (COAG Health Council, 2019, Commonwealth Department of Health and Family Services, 1997).

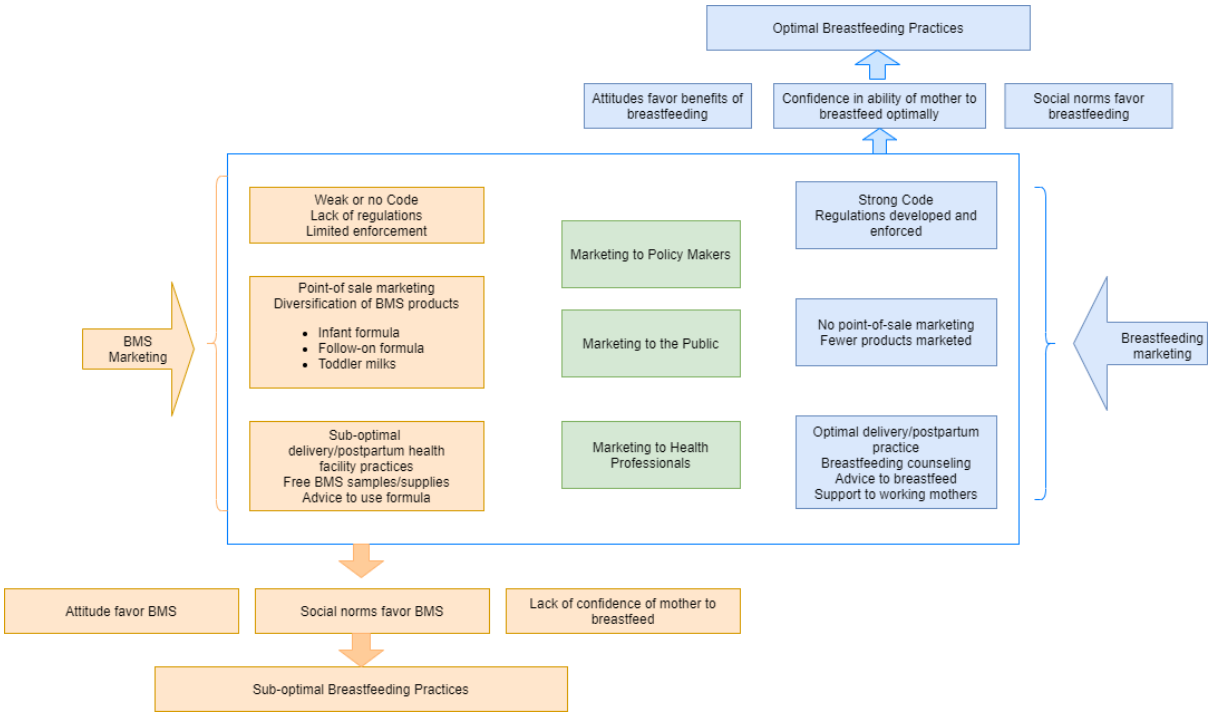
3.1.4 Influence of formula marketing

In Australia, formula marketing influences both the community and health services, most commonly through the promotion of products. For example, health service providers have been offered stipends to attend meetings, seminars or conferences, and have received free gifts (with company logo); and are provided with free formula for hospital discharge packs; and informational brochures and posters

[2] represents Bayer Australia, H J Heinz Company Australia, Nestle Australia, Nutricia Australia, Wyeth Australia

with formula company brands displayed in hospitals (Piwoz and Huffman, 2015b). Such promotion may influence the advice provided by health professionals (Piwoz and Huffman, 2015b) and creates financial incentives for hospitals to use breastfeeding products as less staffing time is directed to breastfeeding support (Australian Government Department of Health, 2017). The promotion of breastmilk substitute (BMS) products, including formula, can lead to sub-optimal breastfeeding practices (Figure 4).

Figure 4. The effect of formula marketing on breastfeeding practices (Piwoz and Huffman, 2015b).



In addition, the National Breastfeeding Strategy draft public consultation (Australian Government Department of Health, 2017) noted that developing brand loyalty becomes more important in the baby food industry as Australian fertility rates decline (Australian Government Department of Health, 2017). For example, in 2017 the total fertility rate[3] for Australia was the lowest on record (1.74), declining from a peak of 3.55 in 1961 (Australian Institute of Family Studies, 2020). Accordingly, formula companies are required to build customer loyalty so that their products will be used over the long term, in order to produce the same financial returns. Follow-on and toddler milks are predicted to drive of estimated future 15.2% growth in high income countries (Rollins et al., 2016).

Follow-on and toddler formula fall within the scope of the Code (World Health Organization, 2017), but not in Australia where the National Health and Medical Research Council (NHMRC) considers

[3] Total fertility rate is the sum of age specific fertility rate (live births at each age of mother per female population of that age)

infants up to twelve months of age as within scope (NHMRC, 2012) and by inference, not infants over 12 months, and therefore the inclusion of follow-on and toddler formula within the Code raises a conflict of interest (International Baby Food Action Network (IBFAN), 2018).

3.1.5 Lack of sustainable funding

Over the last decade the Australian Government has committed to providing support for improving BFHI implementation, particularly in hospitals (National Breastfeeding Strategy 2010-2015, Public Consultation reports in 2017 and 2018). However, funding has yet to materialise. In 2017, it was further recommended that the Government fund the ACM to administer the BFHI process (House of Representatives Standing Committee on Health and Ageing), however, as of 2018, no funding to support this process has been put in place (International Baby Food Action Network (IBFAN), 2018). A commitment to effectively fund the BFHI in Australia should be fulfilled.

3.1.6 Breastfeeding education and health professionals

Health professionals report a lack of knowledge and confidence around their understanding of breastfeeding (Yang et al., 2018) and yet women who receive positive advice regarding breastfeeding from healthcare professionals are more likely to breastfeed for longer (Blixt et al., 2019) Indeed, in Australia, 9 out of 10 GPs have had little or no formal breastfeeding training and rely mainly on personal experience (Holtzman and Usherwood, 2018). This is despite the fact that women with or without breastfeeding-specific issues frequently consulting their GPs during the first 6 months after birth (Brodribb et al., 2008).

Given the influence any healthcare can have on breastfeeding, all health professionals should have a basic knowledge of breastfeeding, in particular who to refer to for further advice and assistance. Midwives, medical practitioners, pharmacists and nurses are likely to require a more in-depth knowledge.

It has been reported that educational programs in Australia do not have adequate breastfeeding content to support the perceived needs of health professional students (Merz et al 2019). The curriculum for education programs for each profession is influenced by a range of standards, guidelines and processes published by respective regulatory authorities, accrediting authorities and peak professional bodies. Reference to human lactation or breastfeeding is included variably.

In the United States, the advice and encouragement provided by health professionals to new mothers about breastfeeding has been described as superficial and insufficient, and leading to early weaning (Radzyminski and Callister, 2016, Dillaway and Douma, 2004).

In Australia, the National Breastfeeding Strategy 2019 recommends that a core curriculum, skills matrix and national competency standards be established for health professionals and maintained thorough ongoing professional development; and in addition, professional competencies should be made visible to the women consulting them (COAG Health Council, 2019). The strategy's recommendations should be implemented.

4 Implementation of the BHFI Internationally

There are several challenges to implementing the BFHI internationally that are mirrored in Australia, including resistance to change by hospital staff, lack of ownership by medical staff and sustainable funding for training (Pan American Health Organization and World Health Organization, 2016). For example, only half of countries reported using government funds for the BFHI programme or activities, instead relying on external funding, particularly from UN organizations and NGOs (World Health Organization, 2017b ; figure 5). This creates a challenge for maintaining the BFHI when the priorities of donors shift to other initiatives. A limited number of countries, including Australia, require hospitals themselves to pay for BFHI accreditation. While this improves the sustainability of the programme, it also creates a financial disincentive for the hospital and may stand in the way of achieving high rates of BFHI accreditation more broadly (World Health Organization, 2017b).

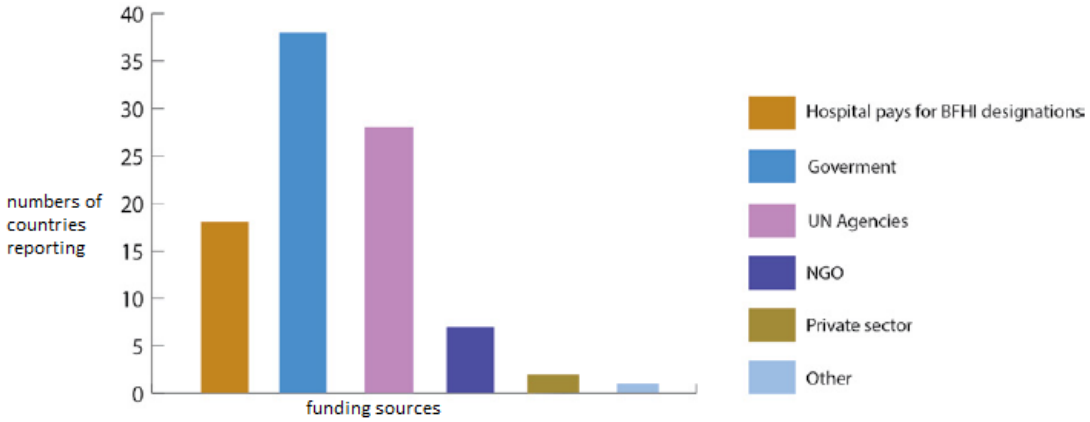


Figure 5. Funding sources of the BFHI program or activities from National Implementation of the BFHI 2017 (WHO, 2017)

Funding breastfeeding programs and policies is critical to support breastfeeding. The World Bank estimates that an investment of US$4.70 per baby is needed to reach the World Health Assembly's (WHA) global target of at least 50% of exclusive breastfeeding by 2025 (World Health Organization and Unicef, 2019).

While successfully achieving BFHI implementation has been attributed to strong leadership, conversely, a lack of political will from senior hospital managers has been reported as a significant barrier to BFHI implementation, with the lack of buy-in related to a general apathy about the importance of breastfeeding (World Health Organization, 2017b). In Australia, support of hospital leadership has also been found to be vital to establishing BFHI policy and building a BFHI culture at macro and micro levels including the external environment, organizational culture, mission and strategy, management practices, structure, systems, work unit climate, motivation, task

requirements, individual skills, needs and values is essential to achieving implementation (Esbati et al., 2020). This aligns with the implementation guidance published by WHO (Figure 6).

Figure 6: National leadership and coordination for breastfeeding (World Health Organization and Unicef, 2018).

Cultural norms on breastfeeding not only affect the general public, but also can affect policy makers, facility directors and health workers. If health professionals do not believe in the importance of breastfeeding, they are unlikely to adhere and may skip one or more of the Ten Steps if they are inconvenient (World Health Organization, 2017b).

Many other countries have implemented the BFHI accreditation and most face challenges to sustain the program. Despite the lack of program evaluation, the following high-income countries have made significant progress to increasing the implementation and accreditation of BFHI.

Successful models of BFHI implementation, or aspects of, could be considered for use in the Australian context.

4.1.1 United Kingdom

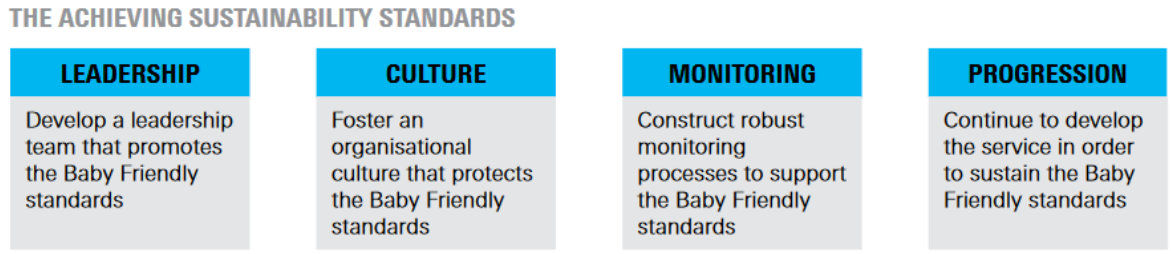
In the United Kingdom (UK), a nuanced approach to the BFHI has been developed based on evidence regarding women's preferences (Schmied et al., 2011) and the importance of prioritising relationships that enable mothers to respond to their babies' hunger cues (Dykes and Flacking, 2010).

Sixty-two percent of UK maternity services have been fully-accredited for the BFHI (Unicef UK, 2019a). The BFHI is administered by UNICEF UK, who works on a cost recovery basis (Grguric et al., 2012) and

accreditation is staged, with each stage assessed externally and hospitals paying per stage (Grguric et al., 2012, Unicef UK, 2020a, Unicef UK, 2020b).

UNICEF UKBFI has also developed Achieving Sustainability standards or the Gold Award, which was designed to help maternity services to embed Baby Friendly care for long term (UNICEF UK, 2019b). The standards are as follows (Figure 7). The Gold Award recognises that services are not only achieving BFHI accreditation, but they also have the leadership, culture and systems to maintain this over the long term (UNICEF UK, 2019b).

Figure 7. The Achieving Sustainability Standard



UNICEF UKBFI also run a Baby Friendly programme for universities through which evidence-based learning outcomes support midwifery and health visiting departments to ensure that their courses equip newly qualified midwives and health visitors to implement the Baby Friendly standards in the workplace.

In addition, the National Institute for Health and Care Excellence (NICE) UK has developed care pathways for maternal and child nutrition, which includes breastfeeding as one of the measurements (National Institute for Health and Care Excellence, 2020).

4.1.2 United States of America

In the United States, the BFHI is administered by Baby-Friendly USA, Inc. (BFUSA), a not-for-profit organisation, specifically established in 1997 to implement the BFHI (Grguric et al., 2012). BFHI accreditation is conducted by credentialed maternity care experts who have a contractual agreement with the BFUSA.

In 2010, the BFUSA launched the 4-D Pathway to Baby-Friendly Designation (Discovery, Development, Dissemination and Designation) (Baby-Friendly USA, 2016), which includes routine data collection, monitoring of practices and quality improvement activities, all of which are considered vital to ensuring that the Baby-Friendly standards are maintained. A fifth phase, sustainability, has since been added.

Following a 'Call to Action to Support Breastfeeding' (US Department of Health and Human Services, 2011) in 2011, Baby-Friendly designation increased from 4.53% of US births in 126 Baby-Friendly designated facilities across 30 states (Anstey et al., 2016) to over 325 US hospitals and birthing centres

in 48 states in 2015. This represents 16.23% of all US births and surpasses the Healthy People 2020 objective (8.1%) for live births occurring at facilities that provide recommended care for lactating mothers and their babies (Anstey et al., 2016).

4.1.3 Brazil

The BFHI was adopted in Brazil in 1992 (Araújo et al., 2019), where the accreditation process (Figure 8) is conducted by the Ministry of Health's, Department of Child Health and Breastfeeding (Lamounier et al., 2019, World Health Organization and United Nations Children's Fund (UNICEF), 2017). The cost of BFHI accreditation (approximately US$750 per hospital), has been funded jointly by the government/s, through the federal, state and municipality budgets (World Health Organization and United Nations Children's Fund (UNICEF), 2017). Baby-friendly accredited hospitals also receive financial incentives, including higher reimbursements for best practices in childbirth (World Health Organization and United Nations Children's Fund (UNICEF), 2017).

Figure 8. BFHI accreditation process in Brazil (Lamounier et al., 2019)

BFHI: Baby Friendly Hospital Initiative; MH: The Ministry of Health

Brazil has regulated on the marketing of baby foods, dummies (pacifiers) and bottles (Lamounier et al., 2019) and integrated this regulation into the BFHI accreditation process (World Health Organization and United Nations Children's Fund (UNICEF), 2017).

In 2014, the Brazilian government included the Women Friendly Care criteria into the BFHI. This included assurance that women can choose their birth companion and their labour position (unless there is medical restrictions), and the inclusion that women would be provided with a quiet, private and cosy environment to give birth and non-pharmacological methods of pain relief (Lamounier et al., 2019, World Health Organization and United Nations Children's Fund (UNICEF), 2017). Hospitals use the online computerized self-monitoring system which can alert them when compliance decreases and support create local improvement mechanisms (World Health Organization and United Nations Children's Fund (UNICEF), 2017).

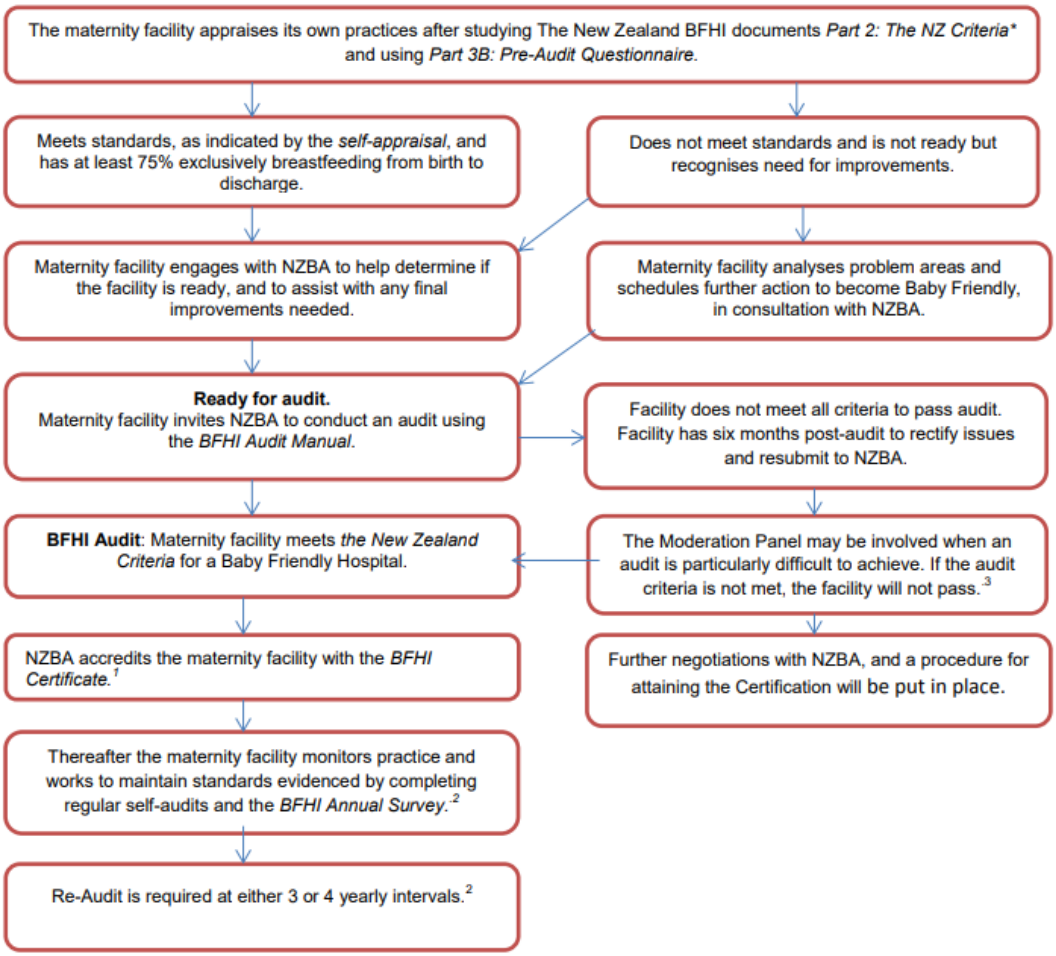
The BFHI has been shown increase the rate of early breastfeeding initiation by 32%, and at a lower cost compared to non-BFHI hospitals; and decrease late neonatal mortality rate by 13% from all causes and decrease the infant mortality rate due to infections by 13% (Silva et al., 2020).

4.1.4 New Zealand

The New Zealand Breastfeeding Alliance (NZBA) was established in 1999 to promote, protect and support breastfeeding through implementation and accreditation of Baby Friendly Hospital Initiative (BFHI) and Baby Friendly Community Initiative (BFCI) (New Zealand Breastfeeding Alliance, 2020).

NZBA consists of hospital maternity managers, midwives, Maori organizations, Pasifika providers, medical groups, lactation consultants, dieticians, Plunket , Parent Centres and La Leche League (New Zealand Breastfeeding Alliance, 2020). They are contracted by Ministry of Health to inform the BFHI accreditation process (Figure 9) and also collecting annual national infant feeding data.

Figure 9. BFHI accreditation process in New Zealand (New Zealand Breastfeeding Alliance, 2017).



BFHI accreditation rose rapidly after NZBA was established, from 0% in 2000 to 96.1% in 2011 (74 of 77 services) (Martis and Stufkens, 2013).

5 Recommendations

In Australia, the intangible value of breastfeeding is not well acknowledged. Programs and policies designed to protect and support breastfeeding women should be prioritised, which in turn, will lead to the prioritisation of public policy development and appropriate budget allocation (Smith, 2013).

5.1 BFHI standards should be integrated into national accreditation standards

BFHI accreditation as an end result of full implementation, should be a requirement for hospitals and community healthcare providers who supply maternity services. Unsustainable funding may impede providers from endeavouring to achieve BFHI implementation and accreditation.

Integrating the BFHI standards into national accreditation mechanisms may be considered a cost-effective way to achieve this. Accreditation could be funded by government, independently from formula companies and their affiliations, and responsibility for the BHFI could be allocated between health service accreditation agencies in order to improve processes. The establishment of an independent governing body would ensure the objective assessment of achieving quality maternity care. By integrating BFHI into national accreditation standards, hospitals can use their resources more effectively and efficiently.

A balanced composition of national assessors is required to ensure the core standard of the BFHI is implemented.

5.2 Professional awareness and knowledge on breastfeeding should be improved

To ensure that health care providers fully understand their rights and responsibilities all health worker organisations and government programs with relevant roles to breastfeeding should include WHO Code compliance as part of their professional ethical standards; and government funding should be linked to Code compliance.

In addition, a minimum level of breastfeeding education should be included in all pre-registration courses and subsequently in continuing workplace education. Assurance will be needed to ensure that accreditation authorities, being responsible for accrediting education providers and programs, have the standards, guidelines and processes to ensure the competence of graduating students in relation to breastfeeding.

5.3 International models of BFHI implementation should be considered for use in Australia

Countries outside of Australia have experienced similar challenges to implementing the BFHI. Lessons learnt from the international experience should be considered and implementation models examined in greater depth to determine suitability for adaptation to the Australian context.

5.4 Education and support for breastfeeding mothers should be supported

Mothers have the right to receive evidence-based information and education regarding infant feeding, as well as support to breastfeed, that is free from commercial interest. This should be prioritised and supported by governments.

5.5 Policies to support breastfeeding and related childcare activities should be implemented in the workplace and community more broadly.

Paid parental leave, lactation breaks, flexible working arrangements and affordable childcare should be made accessible for all working parents. Breastfeeding working mothers who are well supported have been shown to have higher productivity and job satisfaction, while the companies supporting them have lower turnover rate and healthcare cost.

In the community, mothers should have freedom to breastfeed their babies anywhere and anytime. This can be achieved if all public places have policies that protect and support breastfeeding mothers.

5.6 Culturally sensitive breastfeeding programs that align with the 10 Steps should be embedded within holistic primary health care and Aboriginal Community Controlled Health Organisations.

The promotion of, and support for breastfeeding should be accessible to all women and families, regardless of their social, economy, religion and race background. In particular, the development of culturally-sensitive breastfeeding programs within primary care for Aboriginal and Torres Strait Islander women, that align with the Ten Steps breastfeeding standards, are flexible and adapted to local Indigenous beliefs will be important to improving the health and welfare of Aboriginal women and children.

6 Appendix

Ten Steps 1989	Ten Steps 2018
1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff 2. Train all healthcare staff in skills necessary to implement this policy 3. Inform all pregnant women about the benefits and management of breastfeeding 4. Help mothers initiate breastfeeding within one half-hour of birth 5. Show mothers how to breastfeed and maintain lactation, even if they should be separated from their infants 6. Give newborn infants no food or drink other than breastmilk, unless medically indicated 7. Practise rooming in – that is allow mothers and infants to remain together 24 hours a day 8. Encourage breastfeeding on demand 9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic	Critical Management Procedures: 1) a. Comply fully with the *International Code of Marketing of Breastmilk Substitutes* and relevant World Health Assembly resolutions, b. Have a written infant feeding policy that is routinely communicated to staff and parents, c. Establish ongoing monitoring and data-management systems, 2) Ensure that staff has sufficient knowledge, competence and skills to support breastfeeding, Key Clinical Practices: 3) Discuss the importance and management of breastfeeding with pregnant women and their families, 4) Facilitate immediate and uninterrupted skin-to-skin contact and support mothers to initiate breastfeeding as soon as possible after birth, 5) Support mothers to initiate and maintain breastfeeding and manage common difficulties, 6) Do not provide breastfed newborns any food or fluids other than breast milk, unless medically indicated, 7) Enable mothers and their infants to remain together and to practise rooming-in 24 hours a day, 8) Support mothers to recognize and respond to their infants' cues for feeding, 9) Counsel mothers on the use and risks of feeding bottles, teats and pacifiers, 10) Coordinate discharge so that parents and their infants have timely access to ongoing support and care.

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