DOI: 10.1111/mcn.13355

## SUPPLEMENT ARTICLE



# **Becoming breastfeeding friendly in Wales: Recommendations** for scaling up breastfeeding support

Revised: 8 March 2022

Amy Brown<sup>1,2</sup> I Shameela Chucha<sup>3</sup> Heather Trickey<sup>4</sup>

<sup>1</sup>Centre for Lactation, Infant Feeding and Translation (LIFT), Swansea University, Swansea, UK

<sup>2</sup>School of Health and Social Care, Swansea University, Swansea, UK

<sup>3</sup>Public Health Wales, Cardiff, UK

<sup>4</sup>DECIPHer Social Sciences, Cardiff University, Cardiff, UK

#### Correspondence

Amy Brown, School of Health and Social Care. Faculty of Medicine, Health and Life Sciences, Swansea University, SA2 8PP Swansea, UK. Email: a.e.brown@swansea.ac.uk

#### Funding information

Public Health Wales; Family Larsson Rosenquist Research Foundation: Health Scotland; Public Health England

## Abstract

Breastfeeding and the provision of human milk is established as protecting infant and maternal health. However, breastfeeding rates in many countries, including Wales, are low. Given the significant health, economic and environmental impacts of this, the need to strengthen breastfeeding promotion, protection and support is paramount. As part of this, the becoming breastfeeding friendly: a guide to global scale-up (BBF) initiative sets out a methodology to enable countries to assess their readiness to scale up breastfeeding protection, promotion and support by gathering data and scoring progress under eight areas, termed 'gears', shown to be essential for large-scale change. Recently, Wales took part in the BBF initiative. A cross-sector committee, including stakeholders from Universities, Welsh Government, Public Health Wales and Health Boards alongside critical friends scored Wales' support for breastfeeding across the eight gears. The overall score for Wales was 1.1 out of a possible 0-3, representing a moderate scaling up the environment for breastfeeding. Six gears were rated in the moderate gear strength category and two ('Promotion' and 'Advocacy') in the weak gear strength category. Gaps in breastfeeding support were identified and 31 recommendations covering six themes for change were put forward. These included a strategic action plan, consistent and long-term funding, a nuanced, cocreated engagement and promotion framework, strengthened education and training, robust monitoring and evaluation mechanisms and ensuring maternity rights and the International Code of Marketing of Breastmilk Substitute are upheld. Taken together, the analysis and recommendations present a clear vision for protecting and not merely promoting breastfeeding in Wales.

#### KEYWORDS

breastfeeding, becoming breastfeeding friendly, support, policy, public health, infant feeding, government

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. © 2022 The Authors. Maternal & Child Nutrition published by John Wiley & Sons Ltd.

## 1 | BACKGROUND

Breastfeeding and the provision of human milk is established as protecting both infant and maternal health across a range of infectious and noncommunicable diseases (Renfrew et al., 2012; Victora et al., 2016). Based on this, the World Health Organisation recommends that infants are exclusively breastfed for the first 6 months of life with continued breastfeeding up to two years and beyond as long as mother and baby desire (WHO, 2003). However, in the United Kingdom, although 81% of women initiate breastfeeding at birth, fewer than half of infants are receiving any breast milk by 6 weeks of age, with just 1% exclusively breastfed until 6 months of age (McAndrews et al., 2012). Given the significant health, economic and environmental impacts of this, the need to strengthen breastfeeding promotion, protection and support for new families is paramount (Rollins et al., 2016).

In Wales, breastfeeding rates are particularly low. Examining data collected by local health boards, nationally, just 60% of women initiate breastfeeding at birth. This figure drops rapidly; by Day 10 35% of women are still breastfeeding, by 6 weeks 25% and by 6 months just 16% of women are giving their baby any breast milk at all. Rates of exclusive breastfeeding across the first 6 months are even lower (Welsh Government, 2018). Following a similar pattern to other high-income countries, breastfeeding initiation and duration in Wales is not equal across socioeconomic groups (Brown et al., 2010). For example, in Cwm Taf Health Board, which serves some of the most deprived South Wales valley areas, approximately 57% of mothers initiate breastfeeding. Conversely in Powys, a more affluent region, 81% of mothers initiate breastfeeding at birth (Welsh Government, 2021). Meanwhile, younger mothers in Wales are less likely to breastfeed than older mothers, with 46% of mothers aged 20-24 initiating breastfeeding, compared to over 70% of mothers aged 35-39 (Welsh Government, 2020).

Policy is in place to tackle this persistent issue. For example, the Transforming Health in Wales review advocated for breastfeeding to be incorporated into a whole systems approach (Public Health Wales, 2013). Following on from this, the All Wales Breastfeeding Action Plan was published in 2019 with an inclusion of a strategic oversight group to support the delivery of the plan (Welsh Government, 2019a). The overarching goal of the plan is that 'More babies in Wales will be breast-fed, and for longer, and the current inequalities in breastfeeding rates between groups will be reduced'. The plan stated this strategic goal would be delivered via two strands, each with their own set of actions; one focussed on the Health and Care System and the other on a whole system and population approach. Following this of 'A Healthier Wales: Our Plan for Health and Social Care, 2019' further reinforced commitment to a whole system approach (Welsh Government, 2019b).

Becoming breastfeeding friendly: a guide to global scale-up (BBF) sets out a methodology to enable countries to assess their readiness to scale-up breastfeeding protection, promotion and support by gathering data and scoring progress under eight areas, known as 'gears' (Figure 1), shown to be essential for large-scale change in a country's breastfeeding

#### Highlights

- Wales is a small nation with devolved health legislation that should take advantage of its power to enact countrywide, universal breastfeeding policy and strategy.
- Policy, promotion and support should be nuanced and cocreated by communities to meet the needs of the diverse Welsh population.
- Policy must be supported by sustainable investment and political, positional and operational buy-in across government, health and social services.
- Strategy must be evidence-based with an emphasis on women's experiences and voices. Robust monitoring and evaluation mechanisms must be put in place so that data are up to date and meaningful.



FIGURE 1 Breastfeeding gear model, Yale University, 2016

programme/rates (Pérez-Escamilla et al., 2012, 2018). This framework recognises that effective scale-up breastfeeding support is based on investment in multiple components—the gears. Each of these gears has an individual impact but also works in combination with each other. Support and investment in one gear have a positive impact on the other gears, enabling them to work in combination to impact breastfeeding rates. Governments must invest across the eight gears to enable change (Pérez-Escamilla et al., 2012).

In 2017, Public Health Wales accepted an invitation for Wales to participate in the Becoming BBF initiative. This initiative was developed by Yale University and has been undertaken by other countries around the world to evaluate their readiness to scale up breastfeeding protection, promotion and support. The assessment in the United Kingdom was led by a UK-based team (headed by Kent University), with a separate committee in each country (England, Scotland and Wales). Countries around the world have been taking part in the BBF assessment, including Mexico (González de Cosío et al., 2018), Ghana (Aryeetey et al., 2018), Samoa (Soti-Ulberg, 2020) and more. This paper presents findings from Wales in the United Kingdom, one of the first high-income countries to take part in the exercise. This is important because it provides potential contrast of how the initiative works in regions with different health systems and funding, but also due to the trend of higher-income countries often having lower breastfeeding rates (Victora et al., 2016). Scaling up breastfeeding is recognised as a greater challenge in regions where breastfeeding rates are lower to begin with (McFadden et al., 2017).

This paper reports the process (stakeholder discussion of the breastfeeding environment against the gear model) and outputs (agreed gear scores) of the Welsh assessment. It then considers outcomes of the process, presented as recommendations for policy and practice change and development.

### 1.1 | Methodology

This section overviews the process of conducting the BBF assessment in Wales, including context, committee membership, data gathering and scoring process. Public Health Wales were in-country co-ordinators for BBF in Wales and were responsible for chairing, coordinating and moderating the process. The full process for implementing BBF is outlined in the BBF implementation manual (Pérez-Escamilla et al., 2018) and in the Welsh BBF report (Kendall et al., 2019a).

At the heart of this process are five meetings whereby an expert committee consisting of multidisciplinary experts in breastfeeding assess the country against the 54 benchmarks that make up the eight gears of the breastfeeding gear model. These meetings have a set structure and timeline and consist of a premeeting to develop a policy agenda, followed by five meetings to (1) identify the specific objectives, (2) identify the policy options, (3) evaluate the options, (4) advance recommendations and (5) build consensus (Pérez-Escamilla et al., 2018; Hromi-Fiedler et al., 2019). A Delphi method is used to facilitate effective panel communication (Buccini et al., 2019; Hromi-Fiedler et al., 2019).

### 1.2 | Context and location of the research

Wales is a bilingual country within the United Kingdom, with a population of 3.1 million and around 29,000 births per year. It has considerable diversity in population density, deprivation and history across the region. This leads to a cultural and social landscape distinct from the United Kingdom as a whole.

Although it is part of the United Kingdom and follows some UKbased legislation, Welsh devolution in 1997 transferred powers for certain policy areas to the Welsh Government. Health and Social services are one of those devolved powers, which means that health policy, including public health, is set by Welsh rather than UK

Maternal & Child Nutrition -WILEY 3 of 13

Government. In 2012, the policy and delivery functions relating to Welsh infant feeding policy were split; setting policy is the responsibility of Welsh Government but implementation is led by Public Health Wales.

## 1.3 | Participants

Public Health Wales led the establishment of a national committee to conduct the BBF scoring ensuring diversity in roles, experience and location. The final cross-sector committee included stakeholders from Cardiff, Swansea and Bangor Universities, Welsh Government, Public Health Wales and representation from a consultant midwife. with the role of Professional Policy advisor to the Royal College of Midwives. Public health Wales, co-ordinated and provided secretariat support for committee meetings and worked with the University of Kent research team to ensure the process in Wales was conducted in line with the protocol/blueprint as set out by Yale University. This included keeping accurate records and minutes of meetings and providing support for committee members to ensure timely data collection and preparation between meetings. In addition, 'Critical friends' (members from the Royal College of Paediatrics and Child Health and Unicef UK Baby Friendly Initiative), were invited to join the committee to provide constructive support and challenge to the process. Third sector representation was also sought through Le Leche League, but they were unable to attend. It was intended that critical friends would be able to offer alternative perspectives from their respective professions.

## 1.4 | Procedure for scoring

The BBF gear model has eight gears, each of which has benchmarks for considering whether the standards of the gear have been met. For a full description of each of the benchmarks and scoring (see Hromi-Fiedler et al., 2019 for full details). There are 54 benchmarks in total, including advocacy (n = 4); co-ordination, goals and monitoring (n = 3); funding and resources (n = 3); legislation and policy (n = 10); political will (n = 3); promotion (n = 3); research and evaluation (n = 10); training and programme delivery (n = 17) (Appendix A).

In the United Kingdom, the initial United Kingdom premeeting was held in London in December 2017. Principal investigators from three participating UK countries (England, Scotland, Wales) attended a full-day workshop for introduction to the BBF process. Following this, Welsh Government formally agreed to participate. The Welsh BBF committee was then identified (as described in the participants section) and five meetings were held between April 2018 and February 2019 with research completed in interim periods between meetings. For full details of meeting content and interim activity, see Table 1.

To conduct the scoring the committee considered each benchmark individually (see Table 1 for full details). A score for each benchmark was agreed along a scale from 0 to 3 where score options

## -WILEY- Maternal & Child Nutrition

were: 0 (not done), 1 (minimal progress), 2 (partial progress) and 3 (major progress). The justification was made for each score, including supporting data sources and identification of gaps in delivery. When scoring the benchmarks, team members examined the evidence for the preceding 12 months: May 2017 to April 2018.

To undertake this process, in meeting 1, members of the committee were assigned primary responsibility for each gear with two members of the committee attached to each. Members volunteered for gears based on their knowledge and expertise, that is, those working in policy positions volunteered for political will whereas those working in posts relevant to advocacy and promotion were assigned to those gears. Some members of the committee worked on more than one gear.

During the meeting, one of the two committee members assigned to the gear discussed their knowledge of Wales' progress for that gear. In between meeting 1 and 2, members gathered further evidence to support initial scoring, discussing the evidence to agree on an initial score. At meeting 2, these initial scores were presented to the group, followed by a discussion among the whole committee to agree on scores. Any gaps in evidence were identified and between meetings 2 and three further evidence was gathered where necessary. In meeting 3, recommendations were discussed and agreed upon using a Delphi consensus methodology to facilitate effective discussion. Given the high number of recommendations put forward these were thematically grouped for clarity and to assist investment in areas for improvement during meeting 4. In the final meeting, representatives from Welsh Government and Public Health Wales provided further feedback on the recommendations before the report was finalised.

## 1.5 | Data analysis

Agreed scores for each benchmark were totalled for their corresponding gear and a mean gear score was computed. The gear total scores were then aggregated as a weighted average to estimate the total BBF score, which ranged from 0 to 1.0 (weak up-scaling environment), 1.1 to 2.0 (moderate up-scaling environment), 2.1 to 2.9 (strong up-scaling environment) to 3.0 (outstanding up-scaling environment).

#### **TABLE 1** Scoring process for each of the five committee meetings

Meeting 1	An introduction to BBF Methodology, including an overview of gear package documents followed by discussion and small group work. The teams considered who might be involved in scoring for each gear, and how data might be gathered. By the end of the meeting, the group had self-selected into 'gear teams' and started to think about data gathering action plans.
Interim period 1	Between meetings 1 and 2, the gear teams used to document and (social) media searches, collaborative reviews and interviews to document existing policy, practice and gaps from the previous 12 months in response to each of the 54 benchmarks, to start initial scoring of each benchmark. Critical friends (i.e., policymakers and infant feeding leads) also contributed to scoring and data gathering during this period. For the advocacy and promotion gears, the views of parents and the wider public were sought. A series of social media posts were created asking for experiences of the benchmark statements and shared widely in breastfeeding and parenting support groups across Wales.
Meeting 2	Initial scores were presented by each gear team lead, followed by reflection and discussion—both to consider scores in their own right and to compare how other gear team leads had scored in comparison. Recommendations/assistance for further data gathering/sources were also offered, where gear teams had not been able to fully score gears.
Interim period 2	Between meetings, 2/3 additional data gathering and key informant interviews were completed, both by the Wales committee and additional input from the Kent Team where required.
Meeting 3	An overview of the recommendation prioritisation process, which would consist of a Delphi consensus methodology. The remainder of the meeting consisted of a discussion of the final benchmark and gear scores.
Interim period 3	Between meeting 3 and 4 final scores and recommendations were returned to the Kent team in October 2018. In November 2018 BBF Wales and GB BBF team assessed a total of 31 recommendations using a Delphi prioritisation process, which involved assessing the recommendations on their effectiveness, affordability and feasibility through an online survey delivered by the University of Kent.
Meeting 4	The committee went on to group the recommendations thematically using the feedback of the prioritisation survey received and facilitated discussion. They also formulated wording under these themes to best reflect the evidence and actions needed to deliver change, and with a view to current developments in the breastfeeding context. This process produced six themes, under which recommendations were developed. The themes covered all eight gears.
Interim period 4	The wording of the themes and accompanying recommendations were further clarified and built into a 'BBF Wales briefing report' between November 2018 and January 2019, with the draft report circulated to BBF Wales and BBF GB members for feedback between January and February 2019.
Meeting 5	This final meeting was attended by senior representatives of the BBF Wales committee, Public Health Wales and the Welsh Government. Feedback from the meeting was incorporated into the themes and recommendations and circulated to the BBF Wales committee for comment before finalising the report.

Abbreviation: BBF, becoming breastfeeding friendly: a guide to global scale-up.

## 2 | RESULTS

Agreed scores for each benchmark across each of the eight gears can be found in Appendix A. Scores ranged across the different individual benchmarks, with areas ranging from no progress to major progress. Table 2 shows computed overall scores for each of the gears, alongside an overall score for Wales. The overall score for Wales was 1.1, representing a moderate scaling up environment for breastfeeding. Most gears were based in the 'moderate strength' category apart from two in the 'weak strength' category (Promotion and Advocacy). Justification for each category is summarised in Table 2.

As a result of the scoring process and subsequent discussions, gaps were identified and a total of 31 recommendations across six themes for change were put forward. Themes included representation from across the gears and are described in Table 3. Under these themes, a number of recommendations were agreed upon, which were intended to be clear and actionable.

## 3 | DISCUSSION

This paper presents the findings from the Welsh Becoming Breastfeeding Friendly initiative, a process developed by Yale University and led by individual countries to evaluate their readiness to scale up breastfeeding (Pérez-Escamilla et al., 2018). Overall a score of 1.1 out of a maximum of three points was achieved across the gears, which is just within the 'moderate scaling up' category. This indicates that Wales is making some progress towards creating an environment that promotes, protects and supports breastfeeding. Within this score, four gears ('Funding and Resources', 'Training and Diversity', Legislation and Policy' and 'Political Will') scored mid of this range, but the overall score was brought down by the other gears, particularly 'Advocacy' and 'Promotion', which were categorised as having a 'weak' scaling up environment.

Based on these scores it was recognised by the committee that two of the core gears that needed investment were 'Promotion' and 'Advocacy'. These two gears are both closely linked to each other and due to the interconnection of the gears in the model, also closely impacted by the investment in the other gears (Pérez-Escamilla et al., 2018). It is, therefore, important that investment does not solely focus on these areas alone; taking a broader approach to improving support and investment across the indicators would indirectly support promotion and advocacy efforts.

Promotion and Advocacy messaging are not simple areas to get right and must be sensitive to the culture in which they are trying to deliver (Eldredge et al., 2016). Health policy alone does not drive change; it is the subsequent investment in on-the-ground support that is impactful (Nurse et al., 2014). Without this, overly simplistic health promotion messages (such as 'breast is best'), criticised by parents as being unhelpful, fail because this messaging is not followed up by investment in the support needed to ensure a better breastfeeding experience (Brown, 2016).

In terms of what promotion and strategy are happening in Wales, breastfeeding is integrated into policy. In 2001, the initial All Wales Breastfeeding strategy was designed and implemented, with the inclusion of focussed breastfeeding support in schemes such as Flying Start for families in areas of deprivation (National Assembly for Wales, 2001). It is also included in wider service delivery and policy, such as the Childhood obesity 'Ten Steps to a Healthy Weight' and 'Every Child Wales', which seeks to improve the health and wellbeing of children in Wales (Welsh Government, 2019c). This inclusion highlights how breastfeeding is not a separate, time-limited maternity services issue but one that has long-lasting health and developmental impacts at a population level. This is in contrast to the UK Government's Childhood Obesity strategy that failed to include reference to breastfeeding (DHSC, 2018). One positive step would be to ensure that breastfeeding is more clearly included in other strategies where there is evidence of a link such as cancer prevention (Zhou et al., 2015).

However, weaknesses were identified that reduced the impact of the promotion. A core issue was a lack of update or development to the 2001 All Wales Breastfeeding Strategy (National Assembly for Wales, 2001). Although the need for breastfeeding support and promotion was included in later publications such as the 2011 Strategic vision for Maternity Services in Wales (Welsh Government, 2011) and the Public Health Wales Transforming Health Improvement review in 2013 (Public Health Wales, 2013), the Improvement Review concluded that initiatives to promote breastfeeding in Wales were disappointing, with the need to develop and test further interventions to support families. Changes were made to this strategy but not until 2019, notably after the BBF assessment had taken place, meaning its impact was too late for inclusion in the analysis. It will be useful to follow up on the impact of this new strategy as it embeds.

Strategy alone, however, is not enough, and a core element of the scoring of the Promotion gear is that the strategy is implemented. We know what works to support breastfeeding mothers: strategic, consistent, evidence-based and well-funded support (McFadden et al., 2017). Promotion should also move away from individual breastfeeding mothers and instead target wider society (Brown, 2017). Governments should invest in policies and programmes that make a difference in the community, creating an environment in which breastfeeding mothers can thrive (Rollins et al., 2016). This was recognised by 2001 All Wales Breastfeeding Action plan with targeted settings for promotion, including hospitals, schools, public places and the workplace (National Assembly for Wales, 2001). However, a gap between strategy and implementation was found, reiterating the importance of processes such as BBF in helping identify where resources can be targeted to make the leap from policy to practice (Buccini et al., 2019).

Implementing policy and change in a region such as Wales can be a challenge. Breastfeeding support is easier to implement and is more effective in communities where breastfeeding rates are already high (McFadden et al., 2017), yet despite the supportive policy, breastfeeding rates have been low for several generations,

5 of 13

Gear		Score	Category	Justification
Funding and	resources	1.5	Moderate gear strength	While local infant feeding leads are funded for each Health Board by Welsh Government, there is no funded national oversight role or clear national budget allocated to breastfeeding activity and allocations to local health boards are not ring-fenced.
				While maternity entitlements are met through the UK-wide eligibility scheme and Unicef UK Baby Friendly Hospital Initiative programme is funded in Wales, other activities for breastfeeding protection, promotion and support are not covered (e.g., ICMBNS).
Training and	diversity	1.4	Moderate gear strength	While learning outcomes do exist within training for breastfeeding topics and practical skills, in most cases they are neither complete nor coordinated across professional groups and institutions. Some consistency is provided in training for midwives and health visitors in the Unicef UK Baby Friendly Initiative accredited units; however, coverage is not universal in Wales.
				For volunteers and peer supporters, there is some very good training available, but it is not coordinated, learning outcomes are not consistent and ongoing governance arrangements are unclear.
				While lactation consultants exist in Wales, the provision of a specialist breastfeeding service is inconsistent. Lactation consultants with a private practice provide support for parents who can afford it; however, there are concerns about the lack of governance of this, with no registering or monitoring of these qualified practitioners.
Legislation a	nd policy	1.4	Moderate gear strength	There was no breastfeeding action plan with performance targets or means of monitoring of performance standards within early years health provision at the time of the review. The review also found that accreditation was neither mandatory nor covered all areas of health care provision across health boards. Similarly, there was no clear record of breaches and enforcement of Code regulations. Employers were not required to give aid breaks for breastfeeding/expressing and risk assessments were not in place for women returning to work who are breastfeeding.
Political will		1.4	Moderate gear strength	The Welsh government has expressed a commitment to giving every child the best start in life, noting the value of breastfeeding for mother and baby; however, this lacked funds for implementation and recognition of its importance. Where good practice existed, there was a lack of oversight and policy guidance.
Research and	d evaluation	1.3	Moderate gear strength	There is no national survey asking questions about breastfeeding and making comparable data available publicly. While breastfeeding data are collected at a health board level, there are again issues with accessibility and of the completeness of the datasets.
Co-ordinatio monitorii	-	1.0	Moderate scaling up environment	A lack of agreed policy objectives and strategic framework undermines breastfeeding as a public health priority and the collection of data to evaluate progress and impact. Messaging can be mixed and/or incoherent. Local strategic leadership and initiatives/innovations exist but lack national connectivity and oversight.
Advocacy		0.8	Weak gear strength	Government-led advocacy exists but does not always reach the groups most in need. Advocacy often occurs in pockets at a local level, relying on individuals. No national strategy for advocacy.
Promotion		0.3	Weak gear strength	Breastfeeding promotion strategy exists but requires updating. Breastfeeding is embedded into other health and development strategies. Investment to support the strategy is weak. Promotional activities are patchy and often not co-ordinated across Wales.
Overall score	e	1.1	Moderate scaling up environment	

## TABLE 2 Becoming Breastfeeding Friendly Gear scores based on committee discussion

creating a bottle-feeding culture where family and community knowledge of formula feeding is amplified (Brown et al., 2011; Trickey et al., 2017). Health professionals can worry about pressurising mothers (Yang et al., 2018) and a lack of training among some medical professionals can lead to inaccurate advice (Brown et al., 2019). Furthermore, in a relatively rich country juggling numerous health and social care issues, infant feeding can be viewed as an issue that only matters in low- and middle-income regions with a disconnect between how a baby is fed and longer-term health implications (Azad et al., 2021). Investment often

#### TABLE 3 Themes and summary recommendations corresponding to Becoming Breastfeeding Friendly Gear Scores<sup>a</sup>

Theme	Recommendation summary	Gears
A strategic action plan on breastfeeding defines and delivers smart, transformative goals and appropriately resourced, whole system action on breastfeeding, with national and local leadership, coordination and accountability.	<ul> <li>A National Leadership Group to oversee the delivery of an adequately resourced All Wales 5-year action plan on breastfeeding.</li> <li>Local Health Boards deliver local action plans to improve breastfeeding rates, using a continuous improvement approach.</li> </ul>	Co-ordination, Goals and Monitoring, Political Will
Consistent, evidence-informed and long-term government funding and resourcing commitments underpin Wales' multicomponent breastfeeding action plan and enable local delivery of transformative provision for mothers, babies and families.	<ul> <li>Develop a successful evidence-based case for resource uplift by the government in Wales to deliver a sustainable and costed Care Pathway for mothers and babies.</li> <li>Funding and resource allocations are clearly defined with a focus on building strong foundations in the long term across all Local Health Boards.</li> </ul>	Funding and Resources and Co-ordination Goals and Monitoring
A nuanced engagement and promotion framework that is cocreated, consistent and evidence-based is embedded to bring about social change to normalise breastfeeding across Wales.	<ul> <li>Develop a cocreated All Wales messaging strategy focused on areas of low rates that is funded and supported by leaders.</li> <li>Advocates from local lay to national leadership levels are supported to deliver consistent and appropriate messages</li> </ul>	Promotion and Advocacy
Strengthened and coordinated core education and training standards across multiagency partners working with mothers, babies and families in Wales embed a consistent approach for quality improvement across all settings. These standards and approaches must be evidence-based and monitored.	<ul> <li>Acknowledge concern over the cost-benefit of Unicef UK's Baby Friendly Initiative in Wales.</li> <li>Employ the evidence for the Unicef UK Baby Friendly Initiative framework, organise funding and strategic direction under the All Wales Action Plan to justify, extend and enable its reach.</li> </ul>	Training and Programme Delivery, Co-ordination Goals and monitoring
Robust monitoring and evaluation mechanisms deliver reliable, explanatory and comparable data on a timely basis to inform strategy, service improvement and planning, and deliver quality assurance	<ul> <li>Continue to work with key partners and Local Health Boards to understand and strengthen routine data collection and analysis.</li> <li>Establish a mechanism to monitor women's experiences, which is based on a quality improvement agenda and the capacity to assess the impact of interventions at a community as well as individual level.</li> </ul>	Research and Evaluation
Practical actions are delivered in Wales to embed good practice standards among the Welsh government and public organisations concerning Maternity Protection rights and the International Code of Marketing of Breastmilk Substitutes and subsequent relevant WHA resolutions. Strategic action from Wales drives meaningful change on UK-wide issues, including practitioner education and the legislative environment.	<ul> <li>Action plans to strengthen:</li> <li>Lactation support training across professions</li> <li>Legislation around breast milk substitute marketing</li> <li>Maternity protection legislation</li> </ul>	Legislation and Policy

<sup>a</sup>See Kendall et al. (2019b) for full recommendations.

focuses on firefighting the health emergencies of noncommunicable diseases rather than tackling its origins, particularly those that arise in infancy (Hanson & Gluckman, 2015).

This is one reason why legislation to drive change is imperative, highlighting the interactive nature of the gears within the model. Prioritising legislation impacts promotion and advocacy because it gives legitimacy and support to those on the ground working in communities to support families (Kass, 2001). It also works to protect breastfeeding by helping create an environment that supports it (Rollins et al., 2016). Many of the reasons why women stop breastfeeding are to do with public health level factors for which

they are not responsible but that broader legislation could tackle: incorrect medical advice, maternity discrimination and predatory breast milk substitute marketing (Brown, 2017). These factors were identified by the 2016 World Breastfeeding Trends Initiative report as needing to be strengthened in Wales (WBTI, 2016) and the inclusion of these elements in our recommendations will help strengthen the environment in which women breastfeed in.

Although maternity leave and breast milk substitute legislation are the responsibility of the UK government, Wales can make progress by ensuring that legislation is fully enacted. However, as health is a devolved issue, Wales has the power to design legislation

7 of 13

# WILEY- Maternal & Child Nutrition

that is targeted and fit for the people of Wales and can take charge in directing its own infant feeding plans. We can drive that 'revolution from within' as the 'Healthier Wales' strategy describes (Welsh Government, 2019b). For example, one gap in breastfeeding support provision identified by the updated All Wales Breastfeeding Strategy is that Wales is the only UK nation without a Human Milk Bank (HMB), although some donor human milk (DHM) is brought in from England. DHM plays a vital role in protecting the health of sick and premature infants and can be an important bridge to support mothers in establishing breastfeeding (Shenker et al., 2020). The Scottish Government has funded a national HMB, covering the whole of Scotland (GovScot, 2018). Wales would be well-positioned to adopt a similar approach, sending a clear strategic message as to the importance of breastfeeding and human milk.

This is where another gear comes into play: political will. This standard of care cannot be best delivered through local and/ad hoc service provision alone. Direction (and investment) must come from strong leadership in directing a nuanced, woman-centred approach to breastfeeding support across the region (Pérez-Escamilla et al., 2012). This is reflected throughout the recommendations for change but centred within the need for a national leadership group and more interconnected working between health boards.

Welsh Government has already committed to investing in infant feeding leadership across Wales with the goal of delivering more systematic support for breastfeeding mothers. Wales does not currently have a central infant feeding lead, although historically such a position did exist. However, following a review of breastfeeding support and practices in the Maternity and Early Years settings in Wales in 2018, the recommendation was made to create and establish a new strategic infant feeding lead post in every Health Board. However, this was not yet implemented at the time of the BBF assessment. Taking the next step and establishing these positions, and considering the potential impact of a central lead will be an important step in enabling clear, strategic joined-up infant feeding leadership for Wales. It will also send a clear message that infant feeding matters and is worth investing in (Rollins et al., 2016).

Another central aspect of turning strategy into sustainable action is the importance of ensuring services and people are properly funded (Schnell et al., 2013). Breastfeeding advocacy and promotion are hampered in Wales by a lack of funding and human resources, particularly for breastfeeding peer support, which was discussed as part of the BBF assessment. A core part of grassroots breastfeeding advocacy is through peer support delivered by women in communities who themselves have breastfed (Aiken & Thomson, 2013; Moukarzel et al., 2020). Evaluations of peer support typically highlight how much women value it, although the impact on breastfeeding duration is mixed, affected by inconsistencies in delivery and measurement in research (Trickey et al., 2018).

Peer support delivery in Wales is exacerbated by the lack of an All-Wales strategy (at the time of assessment) and structure for delivering training and support. Breastfeeding peer support programmes in Wales were reviewed as part of a major strategic review of national health improvement programmes (PHW, 2013, 2016). Centralised funding for breastfeeding peer support was withdrawn based on limited evidence of impact and has not been reinstated, leading to inconsistencies in delivery. Some Health Boards continued to successfully support peer support programmes while others did not. Research emphasises that consistency in structure and integration into health care services is important in high-quality delivery (Grant et al., 2018) and, therefore, learning from and sharing best practice examples that are being delivered in Wales would be beneficial.

It is important that investment in any recommendations is sustainable and longer term. It takes time for breastfeeding interventions to embed, and if successful they often have incremental impacts over time as communities experience changes to how infants are fed (Pérez-Escamilla & Chapman, 2012). Funding and resource allocations to support breastfeeding must be clearly defined with a focus on building strong foundations in the long term rather than expecting rapid returns. Population-level impacts of infant feeding upon health is a long term but worthwhile investment that must not be stopped due to a lack of immediate evidence of impact (Masters et al., 2017).

As detailed in the recommendations to strengthen data collection, interventions must be evidence-based and research-driven (Glanz & Bishop, 2010), with an emphasis on women's voices (A. Brown, 2016). Meaningful data collection that is based on theoretical frameworks supports service delivery (Kings Fund, 2017). The policy must always turn back to the data, not allowing personal experience or anecdotes to hold false equivalency, no matter how well-meaning (Azad et al., 2021). It is important here to distinguish between data collection that could be considered to be monitoring versus research (Scheirer & Dearing, 2011). Although routinely collected breastfeeding initiation and continuation data is important, it tells us little about breastfeeding barriers and facilitators. Both are needed to help us pinpoint 'what works' and where to direct resources (Leeming et al., 2017).

One core area for this would be up to date research into understanding the driving influences upon infant feeding decisions. Wales data collection was affected by the withdrawal of the UK Infant Feeding Survey, leaving our only large-scale, UK populationlevel data around infant feeding over a decade out of date. In the absence of recommencement of this survey, Wales could build on existing infant feeding data collection by extending inclusion to 2 years of age, in line with World Health Organisation recommendations that breastfeeding should continue for 2 years and beyond (WHO, 2003), alongside data exploring barriers and drivers to breastfeeding success. Scotland moved to design and collect their own data, which has played an important step in their improvement of breastfeeding support (Scottish Government, 2018). A national survey would help Wales develop interventions that work within the local Welsh context.

Finally, teamwork is essential to the delivery of a successful scale-up and was identified throughout the recommendations. Pérez-Escamilla et al. (2012) describe how breastfeeding programmes are based on 'strong intersectoriality' and 'a complex web of multilevel

efforts required for them to function' (Pérez-Escamilla et al., 2012). It is important that strategy is driven by and suited to those at every level of breastfeeding support, including government, hospital and community health professionals, peer supporters and parents themselves (Pyles et al., 2021). Interventions should be targeted to the needs of different communities, which show considerable diversity across Wales (Thomson & Trickey, 2013). Wales is well placed to succeed at working together. As a relatively small region, connections are established as illustrated by the diversity of roles represented at the BBF meetings.

This intersectoriality is one reason why discussions were central at BBF meetings in relation to supporting the Unicef UK Baby Friendly Initiative across Wales. Programmes such as this unite professionals across maternity, neonatal and health visiting services alongside university settings where future professionals are trained. This connection between hospital and community-based services is a core part of breastfeeding support (Pérez-Escamilla et al., 2016). However, in terms of BFI accreditation, Wales has a mixed pattern. Most health visiting and maternity services are accredited (or requiring further assessment), with differing levels of accreditation and intent across neonatal care settings. Three of the five eligible universities have received at least partial accreditation or have registered intent (Baby Friendly Initiative, 2020). Given the evidence of the benefit of BFHI status upon breastfeeding initiation and continuation (Munn et al., 2016), it is important to embed further accreditation and its underpinning evidence to breastfeeding support across Wales.

The process did have its limitations. The BBF initiative is a standardised process and may not have included some aspects specific to different regions. The number of initial recommendations showed the complexity of the challenge of supporting breastfeeding, and Wales may want to revisit recommendations that were not included in the future depending on progress made. Additionally, processes will always be affected by the individuals present (and who were not present). Although close connections ease discussions, they can make more critical discussions challenging.

Limitations aside, the findings from this report are relevant across the field of public health. They highlight how even with significant research evidence as to the benefit of promoting a health behaviour, and policy in place to support that behaviour, wider socioeconomic and cultural factors can reduce the likelihood or ability of even motivated individuals to adopt the behaviour. Strategic investment is needed in the structural and systems levels factors that move past promotion and instead create the environment that empowers individuals to be able to enact different health behaviours. This includes vocal and measurable support from those in positions of political, positional and operational power across government, health and social services. We know what works for breastfeeding and why it is important to invest. The BBF report provides a roadmap for how we make changes that have a real impact on families in the community and those who support them.

## AUTHOR CONTRIBUTIONS

Amy Brown was responsible for data collection, draft report writing and critical revisions. Shameela Chucha was responsible for data collection, draft report writing and critical revisions. Heather Trickey was responsible for data collection and critical revisions.

### ACKNOWLEDGEMENTS

Many individuals from NHS, government, NGO, public health, professional and academic organisations contributed to the work of BBF Wales. Our thanks to all of the BBF Wales committee members including Karen Thompson, Shameela Chucha (PHW), Sarah Fox (ABMUHB), Sheila Brown (Bangor University), Dr. Lucie Warren (Cardiff University), Gethin Jones (RCPCH), Francesca Entwhistle (Unicef UK BFI), Karen Jewell and Craig Thomas (Welsh Government). The BBF team would be honoured to dedicate this paper to Dr Heather Trickey. Heather was a core member of the BBF team and author of this paper, and more importantly a friend, colleague and advisor to many in the world of infant feeding research, policy and support. Sadly, shortly after completing the BBF exercise Heather was diagnosed with cancer and passed away in the weeks before we submitted this paper. Her knowledge, insight and ability for nuance and understanding of how we move such a complex issue forward shine through in this paper and all her work. The world of infant feeding will always be that little bit darker without her. But we hope that the discussions we had around this paper even in the final weeks of her life make a real difference to families in the future. Her insight embedded in this paper ensures that she is very much 'Still here'. Joint funding was provided by the Scottish Government, Public Health Wales, Public Health England and the Family Larsson-Rosenquist Foundation. Amy Brown and Heather Trickey received no funding from the funders for their contribution to this study. Shameela Chucha completed this project as part of her Public Health Wales role.

#### CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

#### DATA AVAILABILITY STATEMENT

Data available on request from the authors'.

#### ETHICS STATEMENT

No ethics approval was required for this study.

## ORCID

Amy Brown D http://orcid.org/0000-0002-0438-0157 Heather Trickey D http://orcid.org/0000-0002-3707-456X

#### REFERENCES

- Aiken, A., & Thomson, G. (2013). Professionalisation of a breast-feeding peer support service: Issues and experiences of peer supporters. *Midwifery*, 29(12), e145-e151.
- Aryeetey, R., Hromi-Fiedler, A., Adu-Afarwuah, S., Amoaful, E., Ampah, G., Gatiba, M., Kwakye, A., Otoo, G., Plange-Rhule, G., Sagoe-Moses, I., Selenje, L., & Pérez-Escamilla, R. (2018). Pilot testing of the

9 of 13

becoming breastfeeding friendly toolbox in Ghana. International Breastfeeding Journal, 13(1), 1–10.

- Azad, M. B., Nickel, N. C., Bode, L., Brockway, M., Brown, A., Chambers, C., Goldhammer, C., Hinde, K., McGuire, M., Munblit, D., Patel, A. L., Pérez-Escamilla, R., Rasmussen, K. M., Shenker, N., Young, B. E., & Zuccolo, L. (2021). Breastfeeding and the origins of health: Interdisciplinary perspectives and priorities. *Maternal & Child Nutrition*, 17(2), e13109.
- Baby Friendly Initiative. (2020). Accreditation statistics and awards. https:// unicefbfi.secure.force.com/Events/Awards
- Brown, A. (2016). What do women really want? Lessons for breastfeeding promotion and education. *Breastfeeding Medicine*, 11(3), 102–110.
- Brown, A. (2017). Breastfeeding as a public health responsibility: A review of the evidence. Journal of Human Nutrition and Dietetics, 30(6), 759–770.
- Brown, A., Finch, G., Trickey, H., & Hopkins, R. (2019). 'A lifeline when no one else wants to give you an answer': An evaluation of the Breastfeeding Network drugs in breastmilk service. https://breastfeedingnetwork.org. uk/wp-content/pdfs/BfN%20Executive%20summary.pdf
- Brown, A., Raynor, P., & Lee, M. (2011). Healthcare professionals' and mothers' perceptions of factors that influence decisions to breastfeed or formula feed infants: A comparative study. *Journal of Advanced Nursing*, 67(9), 1993–2003.
- Brown, A. E., Raynor, P., Benton, D., & Lee, M. D. (2010). Indices of multiple deprivation predict breastfeeding duration in England and Wales. *European Journal of Public Health*, 20(2), 231–235.
- Buccini, G., Harding, K. L., Hromi-Fiedler, A., & Pérez-Escamilla, R. (2019). How does "Becoming Breastfeeding Friendly" work? A programme impact pathways analysis. *Maternal & Child Nutrition*, 15(3), e12766.
- DHSC. (2018). Childhood obesity: A plan for Action. Chapter 2. https:// assets.publishing.service.gov.uk/government/uploads/system/ uploads/attachment\_data/file/718903/childhood-obesity-aplan-for-action-chapter-2.pdf
- Eldredge, L. K. B., Markham, C. M., Ruiter, R. A., Fernández, M. E., Kok, G., & Parcel, G. S. (2016). Planning health promotion programs: An intervention mapping approach. John Wiley & Sons.
- Glanz, K., & Bishop, D. B. (2010). The role of behavioral science theory in development and implementation of public health interventions. *Annual Review of Public Health*, 31, 399–418.
- González de Cosío, T., Ferré, I., Mazariegos, M., & Pérez-Escamilla, R., BBF Mexico Committee. (2018). Scaling up breastfeeding programs in Mexico: Lessons learned from the becoming breastfeeding friendly initiative. Current Developments in Nutrition, 2(6), nzy018.
- GovScot. (2018). Funding for breast milk bank. www.gov.scot/news/ funding-for-breast-milk-bank
- Grant, A., McEwan, K., Tedstone, S., Greene, G., Copeland, L., Hunter, B., Sanders, J., Phillips, R., Brown, A., Robling, M., & Paranjothy, S. (2018). Availability of breastfeeding peer support in the United Kingdom: A cross-sectional study. *Maternal & Child Nutrition*, 14(1), e12476.
- Hanson, M. A., & Gluckman, P. D. (2015). Developmental origins of health and disease–Global public health implications. Best Practice & Research Clinical Obstetrics & Gynaecology, 29(1), 24–31.
- Hromi-Fiedler, A. J., dos Santos Buccini, G., Gubert, M. B., Doucet, K., & Pérez-Escamilla, R. (2019). Development and pretesting of "Becoming Breastfeeding Friendly": Empowering governments for global scaling up of breastfeeding programmes. *Maternal & child nutrition*, 15(1), e12659.
- Kass, N. E. (2001). An ethics framework for public health. American Journal of Public Health, 91(11), 1776–1782.
- Kendall, S., Eida, T. J., & Merritt, R. K. (2019a, July 3). Becoming breastfeeding friendly in Wales: Context, findings and recommendations. In: Launch of the Wales Breastfeeding Action Plan. https://kar.kent.ac.uk/78271
- Kendall, S., Eida, T. J., & Merritt, R. K. (2019b). Becoming breastfeeding friendly (BBF) Wales recommendations briefing report. Technical report. Public Health Wales (Unpublished).

- Kings Fund. (2017). Making the case for quality improvement: Lessons for NHS boards and leaders. https://www.kingsfund.org.uk/publications/ making-case-quality-improvement
- Leeming, D., Marshall, J., & Locke, A. (2017). Understanding process and context in breastfeeding support interventions: The potential of qualitative research. *Maternal & Child Nutrition*, 13(4), e12407.
- Masters, R., Anwar, E., Collins, B., Cookson, R., & Capewell, S. (2017). Return on investment of public health interventions: A systematic review. *Journal of Epidemiology and Community Health*, 71(8), 827–834.
- McAndrew, F., Thompson, J., Fellows, L., Large, A., Speed, M., & Renfrew, M. J. (2012). Infant feeding survey 2010. *Leeds: Health and Social Care Information Centre*, 2(1).
- McFadden, A., Gavine, A., Renfrew, M. J., Wade, A., Buchanan, P., Taylor, J. L., Veitch, E., Rennie, A. M., Crowther, S. A., Neiman, S., & MacGillivray, S. (2017). Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database of Systematic Reviews*, 2017(2).
- Moukarzel, S., Rehm, M., & Daly, A. J. (2020). Breastfeeding promotion on Twitter: A social network and content analysis approach. *Maternal & child nutrition*, *16*(4), e13053.
- Munn, A. C., Newman, S. D., Mueller, M., Phillips, S. M., & Taylor, S. N. (2016). The impact in the United States of the baby-friendly hospital initiative on early infant health and breastfeeding outcomes. *Breastfeeding Medicine*, 11(5), 222–230.
- National Assembly for Wales. (2001). Investing in a better start: Promoting breastfeeding in Wales. https://www.wales.nhs.uk/publications/ bfeedingstrategy-e.pdf
- Nurse, J., Dorey, S., Yao, L., Sigfrid, L., Yfantopolous, P., McDaid, D., & Moreno, J. M. (2014). The case for investing in public health: A public health summary report for EPHO 8. World Health Organisation Regional Office for Europe, Copenhagen.
- Pérez-Escamilla, R., & Chapman, D. J. (2012). Breastfeeding protection, promotion, and support in the United States: A time to nudge, a time to measure. *Journal of Human Lactation*, 28(2), 118–121.
- Pérez-Escamilla, R., Curry, L., Minhas, D., Taylor, L., & Bradley, E. (2012). Scaling up of breastfeeding promotion programs in low-and middleincome countries: The "breastfeeding gear" model. Advances in Nutrition, 3(6), 790–800.
- Pérez-Escamilla, R., Hromi-Fiedler, A. J., Gubert, M. B., Doucet, K., Meyers, S., & dos Santos Buccini, G. (2018). Becoming Breastfeeding Friendly Index: Development and application for scaling-up breastfeeding programmes globally. *Maternal & Child Nutrition*, 14(3), e12596.
- Pérez-Escamilla, R., Martinez, J. L., & Segura-Pérez, S. (2016). Impact of the Baby-friendly Hospital Initiative on breastfeeding and child health outcomes: A systematic review. *Maternal & child nutrition*, 12, 402–417. https://doi.org/10.1111/mcn.12294
- Petroro, R. A., Marola, M., Ferreira, T., Raboin, K., & Lewis, K. K. (2011). A win-win partnership between academia and public health practice. *Public Health Nursing*, 28(6), 543–547.
- PHW. (2013). Transforming Health Improvement in Wales: Working together to build a healthier, happier future. Accessed via https://www.wales. nhs.uk/sitesplus/documents/986/PHW%20Health% 20Improvement%20Review%20Final%20Report%20-% 20260913.pdf
- PHW. (2016). Making a Difference: Investing in Sustainable Health and Wellbeing for the People of Wales. Accessed via https://www.wales.nhs. uk/sitesplus/documents/888/PHW%20Making%20a%20difference %20ES%28Web\_2%29.pdf
- Pyles, T., Umi, S. A., Madubuonwu, S., Stiles, A., Devane-Johnson, S., Scott, H., Rhoads, S., & Russell, J. H. (2021). Breastfeeding sisters that are receiving support: Community-based peer support program created for and by women of color. *Breastfeeding Medicine*, 16(2), 165–170.
- Renfrew, M. J., Pokhrel, S., Quigley, M., McCormick, F., Fox-Rushby, J., Dodds, R., & Williams, A. (2012). Preventing disease and saving

Maternal & Child Nutrition -WILEY

7408709, 2023, S1, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/mcn.13355 by Test, Wiley Online Library on [2206/2023]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons Licenses

202011.pdf 0 ndf 2020.pdf 9241562218.pdf 13(1), 1-11.

- 2021/5/4/1620894624/maternity-and-birth-statistics-2020.pdf WHO. (2003). Global strategy for infant and young child feeding. http://
- Yang, S. F., Salamonson, Y., Burns, E., & Schmied, V. (2018). Breastfeeding knowledge and attitudes of health professional students: A systematic review. International Breastfeeding Journal,
- Zhou, Y., Chen, J., Li, Q., Huang, W., Lan, H., & Jiang, H. (2015). Association between breastfeeding and breast cancer risk: Evidence from a meta-analysis. Breastfeeding Medicine, 10(3), 175-182.

How to cite this article: Brown, A., Chucha, S., & Trickey, H. (2023). Becoming breastfeeding friendly in Wales: Recommendations for scaling up breastfeeding support. Maternal & Child Nutrition, 19(S1):e13355.

https://doi.org/10.1111/mcn.13355

resources: The potential contribution of increasing breastfeeding rates in the UK. https://www.unicef.org.uk/wp-content/uploads/sites/2/ 2012/11/Preventing\_disease\_saving\_resources.pdf

- Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., Piwoz, E. G., Richter, L. M., & Victora, C. G. (2016). Why invest, and what it will take to improve breastfeeding practices? The Lancet, 387(10017), 491-504.
- Scheirer, M. A., & Dearing, J. W. (2011). An agenda for research on the sustainability of public health programs. American Journal of Public Health, 101(11), 2059-2067.
- Scottish Government. (2018). Scottish maternal and infant nutrition survey 2017: Summary of key findings. https://www.gov.scot/publications/ scottish-maternal-infant-nutrition-survey-2017-summary-key-findings
- Shenker, N., Aprigio, J., Arslanoglu, S., Aye, N. S. S., Bærug, A., Bar Yam, N., Barnett, D., Bellad, R., Bertino, E., Bethou, A., Bharadva, K., Olin, A. B., Billeaud, C., Buffin, R., Cassidy, T., Chugh Sachdeva, R., Clifford, V., Coutsoudis, A., Deb, S., ... Wright, J. (2020). Maintaining safety and service provision in human milk banking: A call to action in response to the COVID-19 pandemic. The Lancet Child & Adolescent Health, 4(7), 484-485.
- Soti-Ulberg, C., Hromi-Fiedler, J., Hawley, N. L., Naseri, T., Manuele-Magele, A., Ah-Ching, J., & Pérez-Escamilla, R. (2020). Scaling up breastfeeding policy and programs in Samoa: Application of the Becoming Breastfeeding Friendly initiative. International Breastfeeding Journal, 15(1), 1–10.
- Thomson, G., & Trickey, H. (2013). What works for breastfeeding peer support-time to get real. European Medical Journal: Gynaecology and Obstetrics, 2013(1), 15-22.
- Trickey, H., Thomson, G., Grant, A., Sanders, J., Mann, M., Murphy, S., & Paranjothy, S. (2018). A realist review of one-to-one breastfeeding peer support experiments conducted in developed country settings. Maternal & Child Nutrition, 14(1), e12559.
- Trickey, H., Totelin, L., & Sanders, J. (2017). Nain, mam and me: historical artefacts as prompts for reminiscence, reflection and conversation about feeding babies. A qualitative development study. Research for All, 1(1), 64-83.
- Victora, C. G., Bahl, R., Barros, A. J. D., França, G. V. A., Horton, S., Krasevec, J., Murch, S., Sankar, M. J., Walker, N., & Rollins, N. C. (2016). Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. The Lancet, 387(10017), 475-490.

WBTI. (2016). World breastfeeding trends UK report. https:// ukbreastfeeding.org/wbtiuk2016

Welsh Government. (2011). A strategic vision for maternity services in Wales. http://www.wales.nhs.uk/documents/A%20Strategic%20Vision%20for

%20Maternity%20Services%20in%20Wales%20-%20September%

- Welsh Government. (2018). A review of breastfeeding support and practices in the maternity and early years settings in Wales. https://gov.wales/sites/ default/files/publications/2019-03/a-review-of-breastfeeding-supportand-practices-in-the-maternity-and-early-years-settings-in-wales.pdf
- Welsh Government. (2019a). All Wales breastfeeding five year action plan. https://gov.wales/sites/default/files/publications/2019-06/all-walesbreastfeeding-five-year-action-plan-july-2019\_0.pdf
- Welsh Government. (2019b). A healthier Wales. Our plan for health and social care. https://gov.wales/sites/default/files/publications/2019-10/a-healthier-wales-action-plan.pdf
- Welsh Government. (2019c). Healthy weight, healthy wales. https://gov.wales/ sites/default/files/publications/2019-10/healthy-weight-healthy-wales\_
- Welsh Government. (2020). Maternity and birth statistics: 2020. Statistics from antenatal, birth, and child health records including smoking during pregnancy, breastfeeding and birthweights for children born in Wales in 2020. Accessed via https://gov.wales/sites/default/files/pdfversions/2021/5/4/1620894624/maternity-and-birth-statistics-
- Welsh Government. (2021). Breastfeeding, quarterly rates by age and LHB. Accessed via https://gov.wales/sites/default/files/pdf-versions/
- apps.who.int/iris/bitstream/handle/10665/42590/

## APPENDIX A

See Table A1

Gear	Benchmark	Score
Advocacy	There have been major events that have drawn attention to breastfeeding issues.	1
	There are high-level advocates or influential individuals who have taken on breastfeeding as a cause that they are promoting.	1
	There is a national advocacy strategy based on sound formative research.	0
	A national cohesive network of advocates exists to increase political and financial commitments to breastfeeding.	1
Advocacy gear total score	eb	0.8
Political will	High-level political officials have publicly expressed their commitment to breastfeeding action.	1
	Government initiatives have been implemented to create an enabling environment that promotes breastfeeding.	1
	An individual within the government has been especially influential in promoting, developing or designing breastfeeding policy.	2
Political will gear total sco	ore	1.3
Legislation and policies	A national policy on breastfeeding has been officially adopted/approved by the government.	1
	There is a national breastfeeding plan of action.	1
	The national BFHI/10 Steps has been adopted and incorporated within the health care system strategies/policies.	2
	The International Code of Marketing of Breastmilk Substitutes has been adopted into legislation.	2
	The International Code of Marketing of Breastmilk Substitutes has been enforced.	0
	The International Labor Organization Maternity Protection Convention has been ratified.	1
	There is paid maternity leave legislation for women.	3
	There is legislation that protects and supports breastfeeding/expressing breaks for lactating women at work.	1
	There is legislation supporting worksite accommodations for breastfeeding women.	1
	There is legislation providing employment protection and prohibiting employment discrimination against pregnant and breastfeeding women.	2
Legislation and policies ge	ear total score	1.4
Funding and resources	There is a national budget line(s) for breastfeeding protection, promotion and support activities.	1
	The budget is adequate for breastfeeding protection, promotion and support activities.	1
	There is ≥1 fully funded government position to primarily work on breastfeeding protection, promotion and support at the national level.	1
	There is a formal mechanism through which maternity entitlements are funded using public sector funds.	3
Funding and resources ge	ear total score	1.5
Training and program delivery	A review of health provider schools and preservice education programs for health care professionals that will care for mothers, infants and young children indicates that there are curricula that cover essential topics of breastfeeding.	1
	Facility-based health care professionals who care for mothers, infants and young children are trained on essential breastfeeding topics as well as on their responsibilities under the Code implementation.	1
	Facility-based health care professionals who care for mothers, infants and young children receive hands-on training in essential topics for counselling and support skills for breastfeeding.	1
	Community-based care professionals who care for mothers, infants and young children are trained on essential breastfeeding topics as well as on their responsibilities under the Code implementation.	1
	Community-based health care professionals who care for mothers, infants and young children receive hands-on training in essential topics for counselling and support skills for breastfeeding.	1
	Community health workers and volunteers that work with mothers, infants and young children are trained on essential breastfeeding topics as well as on their responsibilities under the Code implementation.	1

Score<sup>a</sup>

1.0

BROWN ET AL.	Maternal & Child Nutrition – WILEY–
TABLE A1 (Continue	ed)
Gear	Benchmark
	There exist national/subnational master trainers in breastfeeding who give support and training to facility-ba and community-based health care professionals as well as community health workers.
	Breastfeeding training programs that are delivered by different entities through different modalities are coordinated.
	Breastfeeding information and guidelines to develop skills are integrated into related training programs.
	National standards and guidelines for breastfeeding promotion and support have been developed and disseminated to all facilities and personnel providing maternity and newborn care.
	Assessment systems are in place for designating BFHI/10 Steps facilities.
	Reassessment systems are in place to reevaluate designated Baby-Friendly/10 Steps criteria.
	More than 66.6% of hospitals and clinics offering maternity services have been designated or reassessed as "Baby-Friendly" in the last 5 years.
	Health care facility-based community outreach and support activities related to breastfeeding are being implemented.
	Community-based breastfeeding outreach and support activities have national coverage.
	There are trained and certified lactation management specialists available to provide supportive supervision breastfeeding program delivery.
Training and program de	livery gear total score
Promotion	There is a national breastfeeding promotion strategy that is grounded in the country's context.
	The national breastfeeding promotion strategy is implemented.
	Government or civic organizations have raised awareness about breastfeeding.
Promotion gear total sco	re
Research and evaluation	Indicators of key breastfeeding practices are routinely included in periodic national surveys.
	Key breastfeeding practices are monitored in routine health information systems.
	Data on key breastfeeding practices are available at national and subnational levels, including the local/municipal levels
	Data on key breastfeeding practices are representative of vulnerable groups.
	Indicators of key breastfeeding practices are placed in the public domain on a regular basis.
	A monitoring system is in place to track the implementation of the Code.
	A monitoring system is in place to track the enforcement of maternity protection legislation.
	A monitoring system is in place to track the provision of lactation counselling/management and support.
	A monitoring system is in place to track the implementation of the BFHI/10 Steps.
	A monitoring system is in place to track behaviour change communication activities.
Research and evaluation	gear total score
Co-ordination, goals and	There is a National Breastfeeding Committee/IYCF Committee.
monitoring	National Breastfeeding Committee/IYCF Committee work plan is reviewed and monitored regularly.
	Data related to breastfeeding program progress are used for decision-making and advocacy.
Constitution and	

Coordination, goals and monitoring gear total score

<sup>a</sup>Benchmarks score: 0 (no progress), 1 (minimal progress), 2 (partial progress), 3 (major progress).

<sup>b</sup>GTS (individual gear total score): 0 (gear not present), 0.1–1.0 (weak gear strength), 1.1–2.0 (moderate gear strength), and 2.1–3.0 (strong gear strength).