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Becoming breastfeeding friendly in Great Britain—Does implementation science work?

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Abstract

The Becoming Breastfeeding Friendly (BBF) in Great Britain study was conducted during 2017–2019 comprising three country studies: BBF England, Wales and Scotland. It was part of an international project being coordinated during the same period by the Yale School of Public Health across five world regions to inform countries and guide policies to improve the environment for the promotion, protection and support of breastfeeding. This paper reports on the application of the BBF process that is based on an implementation science approach, across the countries that constitute Great Britain (England, Wales and Scotland). The process involves assessing 54 benchmarks across eight interlocking gears that drive a country's 'engine' towards a sustainable policy approach to supporting, promoting and protecting breastfeeding. It takes a consensus-oriented approach to the evaluation of benchmarks and the development of recommendations. This paper provides a critical overview of how the process was conducted, the findings and recommendations that emerged and how these were managed. We draw on critical theory as a theoretical framework for explaining the different outcomes for each country and some considerations for future action.

KEYWORDS

breastfeeding, implementation science, public health policy, critical theory

1 | INTRODUCTION

The World Health Organisation and UNICEF in the Innocenti Declaration (2007) advised all countries to increase support for breastfeeding and recommended that all infants should be exclusively breastfed up to 6 months of age and continue to receive breast milk up to the age of 2 years. Many countries have struggled to achieve this and the United Kingdom remains one of the lowest breastfeeding nations in the world. Becoming Breastfeeding Friendly (BBF) is a global initiative coordinated by Yale University (Pérez-Escamilla et al., 2018) with the purpose of addressing the worldwide need to

scale up the promotion, protection and support of breastfeeding at the national government level. The intention of this initiative is to assess the strength of eight dimensions of the enabling environment for breastfeeding and use these data to develop country-based, evidence-informed policy recommendations, which can then be implemented by country policymakers and stakeholders, and evaluated for their impact on the breastfeeding environment. These eight interlocking components or 'gears' are visualised in the BBF Gear Model (Figure 1) (Pérez-Escamilla et al., 2012). Based on a systematic review of the evidence of 'what works' for strengthening the breastfeeding environment, the gears were systematically identified

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taking into account the international experiences of countries that have been successful at scaling up breastfeeding programmes across different world regions to make a positive difference (Pérez-Escamilla et al., 2012). The approach of using the BBF Gear Model to generate country-specific practice and policy-focused recommendations is based on implementation science—the process of taking an evidence-informed approach to translating and evaluating the delivery of research into policy or practice (Lobb & Colditz, 2013). We discuss this further in this paper. The aim of this paper is to explore the BBF process as it was conducted in England, Wales and Scotland and to draw some conclusions about the impact of BBF on the translation of evidence into policy and practice.

In December 2017, a committee of policymakers, practitioners, academics, professional organisations and nongovernmental organisations (NGOs) from three countries across the United Kingdom (England, Wales and Scotland) came together to form the BBF Great Britain advisory group. The committee was selected by a process of determining the necessary academic, political and practical expertise; it was led by the University of Kent in consultation with Yale University, policy leaders and NGO/practice leaders. The group was made up of the following representatives:

- Academia: Universities of Kent, Dundee and Central Lancashire.
- Policy: Public Health England, Public Health Wales, Scottish Government.
- Professional organisations: Royal College of Paediatrics and Child Health, Institute of Health Visiting, General Practitioner Infant Feeding Network.
- NGOs: UNICEF UK Baby Friendly Initiative, World Breastfeeding Trends Initiative, Breastfeeding Network, First Steps Nutrition Trust.



FIGURE 1 BBF Gear Model

Key messages

- Undertaking an international, comparable approach to develop evidence-based policy recommendations for scaling up the breastfeeding environment can provide useful data on which to draw explanations and conclusions on national variation.
- The findings from the BBF process across England, Scotland and Wales suggest that improving breastfeeding in Great Britain is dependent on the degree of political will and having a coordinated national breastfeeding strategy in place or not, along with access to robust breastfeeding data.
- A critical theory lens helps to bring to light some differences in the research and policy process that can explain differences between countries in the United Kingdom.

The purpose of the advisory group, chaired by the lead author (S. K.), was to provide oversight and critical review of a complex process of policy analysis across the three countries to assess the potential for strengthening and scaling up the breastfeeding environment. Originally, the authors had discussed a BBF process similar to that undertaken in other countries, such as Mexico (González de Cosío et al., 2018) and Germany (Flothkötter et al., 2018), would take place as a single process across the United Kingdom. However, it quickly became apparent that due to the complexity of centralised and devolved governments within the United Kingdom, each country would need to be treated separately. It also emerged that, due to a reduction in capacity and resources, Northern Ireland was not ready to be part of the BBF process at that time, resulting in a three-country study. Three BBF country-specific committees of stakeholders were created, each co-chaired by S. K. and a country-based government or public health representative.

In the United Kingdom, the political system is designed so that some areas of government are held centrally by Westminster and others are devolved to the constituent countries of Wales and Scotland where political decision-making is arrived at independently of Westminster by Welsh and Scottish Governments (Cabinet Office Office of the Secretary of State for Scotland Northern Ireland Office and Office of the Secretary of State for Wales, 2013). Devolved areas include health and social care, including public health, and therefore infant feeding policy and advice, while UK Government retains control over issues such as employment regulation. Undergoing an in-depth analysis and understanding of how each country could scale up its environment for the promotion, protection and support of breastfeeding was therefore against a backdrop of political complexity, cultural and historical differences as well as variation in geography, demography and economic contexts. These contexts are described in the following country-based papers (Brown et al., 2022; McFadden et al., 2022; R. Merritt et al., 2022). The

purpose of this paper is to set the scene for BBF GB and each country's analysis while exploring the process of implementation science through a critical lens that we outline below.

2 | IMPLEMENTATION OF SCIENCE AND BBF IN BRITAIN

The BBF programme, which is led by Yale University, is a global approach to scaling up the promotion, protection and support for breastfeeding (the enabling environment for breastfeeding) at the national policy level. The rationale for the BBF approach is that by bringing the relevant country-level data together—guided by a systems-based framework—local and national governments will have the evidence and depth of knowledge and understanding of the breastfeeding environment to identify and address the policy issues that need to change to enable positive, constructive, measurable and sustainable large-scale breastfeeding programmes. The purpose of the BBF programme is to improve the promotion, protection and support of breastfeeding at community, country and global levels to empower families to breastfeed and provide breast milk, improve health outcomes for babies and mothers and address health inequality. The evidence base for the effectiveness of breastfeeding for health improvement and prevention of disease is already very well established (Acta Paediatrica, 2015; Horta et al., 2015; Renfrew et al., 2012; Victora et al., 2016) and summarised in a range of resources that are publicly available (e.g., UNICEF UK, 2021).

While the evidence in favour of breastfeeding is by now indisputable, there are huge variations globally in rates of initiation, continuation of breastfeeding and exclusive breastfeeding, despite the WHO and other international guidance on infant feeding (WHO, 2021; WHO & UNICEF, 2017). Pérez-Escamilla and Hall Moran (2016) suggest that this is can be explained in a large part by the lack of evidence-based scaling up efforts that are guided by complex adaptive systems frameworks such as the Breastfeeding Gear Model. Multiple factors such as culture, economy, personal preference and political context affect the decision to breastfeed (Rollins et al., 2016); therefore, the BBF programme reflects the evidence that breastfeeding is not simply a personal decision that parents come to during pregnancy or childbirth. It acknowledges that infant feeding decisions are made in a complex environment, driven by a series of policy actions that have consequences for the individual, community and country. Thus, the BBF programme is centred on the Breastfeeding Gear Model, which visually represents the range of policy actions and the inherent complexity of these drivers through the eight gears of the model (Figure 1) (Pérez-Escamilla et al., 2012).

The model is described in further detail in the following contributions: Brown et al. (2022), McFadden et al. (2022) and R. Merritt et al. (2022). To operationalise the Gear Model, the BBF programme presents a toolbox of benchmark assessment and scoring criteria, case studies and process guidance that was developed by an international technical advisory group in 2012 (Pérez-Escamilla et al., 2018). The BBF

toolbox, which has been applied during seven previous country assessments, gives countries the set of tools needed to: (1) assess their current programmes and policies, (2) help determine their readiness to scale up actions to improve the breastfeeding enabling environment and then (3) develop viable recommendations for their specific context (Pérez-Escamilla et al., 2018). The process seeks to build collaboration within-country committees through the focus on the evidence base and a structure that promotes consensus-oriented decision-making at each stage (Buccini et al., 2019).

The significance of this initiative for health outcomes is the systematic methodological approach to implementing evidence-based action on policy and its subsequent impact on the breastfeeding environment. The contributions related to this issue (Brown et al., 2022; McFadden et al., 2022; R. Merritt et al., 2022) from England, Scotland and Wales discuss the process and results of using the BBF programme and the policy recommendations that were arrived at in each country. They have selected areas of importance for each of the countries within Great Britain that are discussed in greater depth. As a forefront to those papers, we discuss here our reflections on the process of *implementation science* that lies behind BBF and the subsequent issues related to social and political change that influence how political action is implemented or not and what this means through a critical lens (Lobb & Colditz, 2013; Scambler, 2001).

3 | IMPLEMENTATION SCIENCE

Implementation science has been recognised in the last 20 years as an approach to improving health outcomes, inequality and return on investment that builds on the basic science and efficacy evidence of a topic, and translates the evidence into policy and practice. It was developed as a methodological approach in its own right through increasing recognition that countries expend millions of pounds or dollars on health care and health research but much less on implementing the strong evidence identified through the research. Lobb and Colditz (2013) provide an excellent overview of how implementation science can be applied to improve population health and make a difference to the burden of disease on an economy. 'A goal of implementation science for health is to identify the factors, processes and methods that can successfully embed Evidence-Based Interventions in policy and practice to achieve population health. Evidence-based refers to interventions that have undergone sufficient scientific evaluation to be considered effective' (Lobb & Colditz, 2013, 238). They discuss a five-level process for implementation of science in relation to population health (Lobb & Colditz, 2013):

- Level 1—The funding and development of the basic science.
- Level 2—The necessary trials and observational studies to test the efficacy of an intervention.
- Level 3—Systematic reviews, synthesis and meta-analysis from studies that demonstrate the strength of evidence.

- Level 4—Implementation of the evidence into policy and practice.
- Level 5—The evaluation of the implemented actions.

The BBF process is mainly concerned with Levels 4 and potentially Level 5 of the implementation science process. This is because it seeks to assess the factors that affect the *implementation process* using the Gear Model-based toolbox. Furthermore, BBF is informed by Levels 1–3 as the evidence justifying it comes from breastfeeding research conducted over several decades. Lobb and Colditz (2013) demonstrate the inter-relationship between the stages visually and show how the interdependence between basic science, trials of efficacy, public health policy, health service provision and dissemination that the complexity of implementation has to be analysed and understood in order for the political wheels to turn and make a difference.

4 | POLICY AND EVIDENCE BASE FOR POLICY IN THE UNITED KINGDOM IN RELATION TO INFANT FEEDING

Before establishing the stage that a country is at for scaling up the breastfeeding environment, there needs to be a clear evidence-based rationale for why breastfeeding should be a priority for public health and policy. This relates to Level 3 of the Lobb and Colditz (2013) model—the evidence from systematic reviews and meta-analysis of the efficacy and effectiveness of breastfeeding itself for maternal and child health improvement and the interventions and processes that have been evaluated using high-quality research methods to demonstrate their effectiveness and cost-effectiveness in promoting breastfeeding. This body of literature is now well established and continues to expand. It was not the purpose of the BBF within-country studies to revisit undertaking the review of the evidence, but rather to draw on it to evaluate the components of the Gear Model to assist the BBF teams in their task of coming to a consensus on the priority areas for policy development or updates and programme implementation. However, key areas of the evidence base for breastfeeding summarised below were drawn on by the BBF teams across England, Wales and Scotland.

5 | EVIDENCE BASE FOR BREASTFEEDING

There is very strong evidence for the role that breastfeeding plays in infant nutrition and the health and wellbeing of mothers and babies (e.g., Horta et al., 2015; Relton et al., 2014; UNICEF UK, 2021; Victora et al., 2016). This collective evidence suggests that further research is needed that brings together high-quality evidence of health outcomes and mechanisms with an improved understanding of the complex system in which mothers make decisions about breastfeeding, and social disparity persists (Davies, 2013, 2014; Horta et al., 2015; NICE, 2010, 2014, 2021; Relton et al., 2014; UNICEF UK, 2021; Victora et al., 2016). Such evidence could be

collected from the real-world implementation of processes and interventions that already exist in a country using a benchmarking approach such as the BBF Gear Model alongside other large-scale cohort and observation studies.

Although breastfeeding rates have improved across the United Kingdom over the last 20 years, the implementation of the evidence in a systematic, evaluative way that can demonstrate improvement and return on investment has been lacking, not least by the omission of a nationally comparable data set on infant feeding practices since 2010 in the United Kingdom (NHS Digital, 2012). The BBF cycle provides a standardised cross-country approach to assessing the extent to which evidence-based practices and policies have been put in place with the potential to observe the measurable change in the implementation process over time. The relationship between the evidence, the data, the actions around training, advocacy, promotion, the political will, funding co-ordination and monitoring of activity are central to the assessment and scoring of the 54 criteria associated with the eight BBF gears process as a system-wide approach to scaling up the breastfeeding environment. The measurement over time of improvements in breastfeeding rates, infant and maternal health outcomes, professional education and training and return on investment will be indicators of the success of the longer-term impact of the BBF process and ongoing identification of priority areas of policy and practice need.

6 | THE METHODOLOGICAL PROCESS

A key step of the BBF process is to assess the readiness of a country to scale up the environment for breastfeeding by scoring against the evidence-informed Gear Model benchmarks, before developing a set of agreed policy recommendations that are intended for implementation. The Gear Model, developed through systematic review and key informant interviews led by Pérez-Escamilla from Yale University (Pérez-Escamilla et al., 2012) incorporates all the elements of a positive breastfeeding environment that can be assessed and scored at the country level, as shown in Figure 1 above. It is operationalised by the BBF toolbox of gear-based benchmarks and scoring criteria (the BBF Index), meeting frameworks and guidance for policy recommendation development. The BBF toolbox was developed and approved by an international team through a consensus-building Delphi process (Pérez-Escamilla et al., 2018). A BBF committee was established in each of the three countries following the international BBF standard procedures to undertake the assessment and scoring of each gear domain and to reach a consensus that could lead to policy recommendations. The Becoming Breastfeeding Friendly in Great Britain (BBF-GB) committee acted as a governance body that could be a forum for debate about country variations, a source of additional expertise and guidance and a way of ensuring checks and balances were in place. An important aspect of the country committees was to ensure buy-in and ownership from policymakers early on and thus each country included members of the departments of government responsible for children's public

health and/or infant feeding. In addition, each country had representatives from academia, NGOs and health care delivery, which included the NHS as well as professional organisations and peer support organisations. The public voice was heard through peer support and advocacy representatives. Each country committee held five (four in Scotland) half to one day meetings during 2018–2019, during which time they were divided into Gear Teams to assess the evidence for scoring each Gear against a set of criteria based on the previous 12 months. The full criteria and scoring methodology can be found at <https://ysph.yale.edu/bfci/bbf/>. The whole process for BBF-GB, therefore, involved 14 country committee meetings across England, Wales and Scotland, in addition to the three BBF-GB committee oversight meetings, resulting in a vast quantity of material that included:

- Audio recordings of all meetings.
- An archive of published and unpublished evidence on breastfeeding.
- Semistructured qualitative interviews with individuals from policy, informatics, maternity and health care, advocacy and parent perspectives: A total of 16 in-depth interviews. Nine interviewees commented from a UK-wide perspective; one reflected on the United Kingdom in the international context and the remaining six spoke specifically about a particular country (England, Scotland or Wales).
- Media analysis.
- Detailed notes of presentations and discussions.
- Infographics of emerging topics and themes.

These data were analysed thematically by the Kent research team for each country to assist gear teams in reaching their agreement on scores and the final recommendations. The themes were presented back to the country committees in an iterative prioritisation process that supported the Delphi approach to arriving at a consensus on a long list of recommendations based on the score for each gear for each country. As is shown in the papers that follow (Brown et al., 2022; McFadden et al., 2022; R. Merritt et al., 2022),

there was considerable variation in the scores for each country, summarised in Table 2.

7 | VARIATION IN POLICY APPROACHES ACROSS PUBLIC HEALTH DEPARTMENTS IN ENGLAND, WALES AND SCOTLAND

In establishing the BBF GB advisory group, it became immediately apparent that each country is very different in terms of structure, organisation and policy processes. The papers that follow describe each country's context in more detail. The key differences between countries are compiled in Table 1.

In addition to the complexity of decision-making and funding associated with the different models of commissioning and providing breastfeeding support, the three countries also have different governance around other aspects of promoting and protecting breastfeeding, such as laws around breastfeeding in public, which are protected under Scottish law by the *Breastfeeding etc. (Scotland) Act 2005*, (Scottish Government, 2005) but by the *Equality Act 2010* in England or Wales (UK Government, 2010), leading to variations in interpretation and implementation. Employment law is protected by the UK Government from Westminster meaning that while the three countries have to observe the rights of breastfeeding women in the workplace there is little scope for countries to regulate their own employment conditions. Maternity action (<https://maternityaction.org.uk/>) provides guidance on all the laws surrounding breastfeeding and employment rights.

There is also variation in the extent to which the UNICEF UK Baby Friendly Standards have been implemented across the three countries; UNICEF UK (2020, accessed 2021) reported the proportion of births taking place in fully accredited Baby Friendly maternity units as:

- England, 53%.
- Scotland, 100%.
- Wales, 86%.

TABLE 1 Variations in policy structure and organisation across England, Wales and Scotland in 2018–2019

	England	Wales	Scotland
Strategic/Policy Leadership	Public Health England (one of the Department of Health and Social Care's arms-length bodies until 30 September 21)	Public Health Wales, NHS Wales responsible for Welsh Government	Scottish Government
Responsible Division	Best Start	Public Health Wales and Chief Nursing Officer	Infant Feeding Lead
Commissioners	Local Authorities	Local Health Boards and Local authorities	Health Boards
Policy implementation and delivery	NHS Trusts	Local Health Boards among others, including the third sector	Health Boards
Dedicated government funding source for breastfeeding	No	No	Yes (part of the 2018–2019 programme for the government)

Further variation exists in the implementation and delivery of Breastfeeding Networks that directly support parents, and in the collection of data. Since the UK-wide Infant Feeding Survey was discontinued after 2010, Scotland has conducted its own infant feeding survey (Scottish Government, 2018), while England and Wales have not taken part in a national survey since 2008 (McAndrew et al., 2012) and rely on routine data collection by health visitors. These are described in more detail in the following country papers (Brown et al., 2022; McFadden et al., 2022; R. Merritt et al., 2022), but these layers of variation and complexity added to the rationale to undertake the BBF process across the three countries to make some observations and recommendations about how breastfeeding could be improved.

8 | FINDINGS IN BRIEF

The tables below summarise the findings from the three GB countries in terms of their scoring against the BBF benchmark criteria, the gaps revealed and the recommendation themes that were reached through the prioritisation process. The details for each country's findings can be seen in Brown et al. (2022), McFadden et al. (2022) and R. Merritt et al. (2022).

The mean gear scores in Table 2 below represent the strength of a country's current environment within each gear with regard to scaling up breastfeeding protection, promotion and support. They are the mean of the corresponding component benchmarks as scored by the gear team in the BBF country committee. Scores of 0–1 denote a weak gear strength, 1–2 is moderate and 2–3 represents a strong gear within that country.

The thematic analysis of the data collected for benchmark scoring highlighted the gaps in each of the gear areas requiring action to strengthen the breastfeeding environment. Table 3 provides an overview of these gaps.

TABLE 2 Mean gear scores calculated per country illustrate the strength of each aspect of the breastfeeding environment

BBF Gear	Mean BBF gear scores: range: 0 (weak)–3 (strong)		
	Wales	England	Scotland
Advocacy	0.8	0.8	2.0
Political Will	1.3	1.3	3.0
Legislation and Policies	1.4	1.2	1.6
Funding and Resources	1.5	1.3	3.0
Training and Programme Delivery	1.4	1.5	2.5
Promotion	0.3	0.7	1.7
Research and Evaluation	1.4	1.1	2.2
Coordination, Goals and Monitoring	1.0	0.7	3.0

Abbreviation: BBF, Becoming Breastfeeding Friendly.

The gear teams within each country committee followed the BBF process to formulate initial recommendations addressing the gaps identified through gear analysis. Country committees were then guided through a process to prioritise the recommendations in terms of affordability, feasibility and effectiveness, and agree to priority recommendation themes by consensus. Themes were further defined by more detailed recommendations, agreed upon by the relevant country committee. Each country committee faced different challenges in its decision-making process towards recommendations and on this basis chose to focus on some specific aspects of their implementation challenge in the papers that follow (Brown et al., 2022; McFadden et al., 2022; R. Merritt et al., 2022). Table 4 shows the variation in recommendation themes in each country and the discussion section below reflects on the nuances of how recommendations were reached according to the varying priorities.

9 | DISCUSSION

It is scarcely surprising that a country like the United Kingdom with enormous variations in geography, demography, economy and political and policy processes will exhibit variation in public health indicators such as breastfeeding and in the ways in which breastfeeding can be supported, promoted and protected. It is nonetheless important to explore an explanatory model for why breastfeeding, which appears on the surface to be a natural, straightforward, nurturing activity, has become a political topic of public, academic and private debate, some of which can be observed in the media analysis presented in this series by R. Merritt et al. (2022). The purpose of implementation science is to identify evidence-based implementable policies and actions that can make a difference in public health. The process of implementation is complex as is the evaluation of implementation. The Gear Model provides a standardised approach for countries to reach a set of implementable recommendations that can be evaluated. Yet, each country faced challenges in the policy arena that could frustrate the process of bringing real change for the health and lives of babies and families and the cost-effective use of government funds for public health.

One example is the cessation of the National UK Infant Feeding Survey since 2010, which has led to a lack of comparable current and trend data across the United Kingdom on infant feeding for over a decade. Despite recognition by all three countries and the constituent gear teams of this absence of current data, there was little political will to reinstate it with a new approach or to advocate for it at a level of government (such as the health minister) where the data would drive decision-making.

Although all the countries followed the same process, each of the countries approached BBF in its own unique way. There was frequent disagreement around the evidence base for certain interventions, such as greater enforcement of the International Code of Marketing of Breast-milk Substitutes and the upscaling of the UNICEF UK Baby Friendly Initiative. Despite the strong evidence supporting action around these two interventions, not all countries prioritised them or

TABLE 3 Key gaps were identified in each gear component of the breastfeeding environment by the BBF committees

BBF Gear	Gaps identified in the breastfeeding environment by BBF gear and country		
	Wales	Scotland	England
Advocacy	<ul style="list-style-type: none"> • Absence of underpinning goals and values; no link to any clear action plan or evaluation strategy • No clear message framework for advocacy; unclear who the key influencers are 	<ul style="list-style-type: none"> • No explicit marketing or advocacy standards • There is an opportunity for a centrally coordinated advocacy strategy with closer cohesion and communication/information sharing with and between third sector organisations • Potential to identify Scotland based champions 	<ul style="list-style-type: none"> • Lacks a coordinated, cohesive, strategic and sustained programme of work or singular campaign • There are advocates, however, there is no single coordinated network of advocates (All-Party Parliamentary Group on Infant Feeding and Inequalities [APPG-IFI] is not a strategic group) • Quality activity, but the impact is not clear in terms of societal shift
Promotion	<ul style="list-style-type: none"> • Breastfeeding strategy requires coordination and greater multicomponent systems focus to support breastfeeding based on the evidence • Requires monitoring and evaluation as well as funding 	<ul style="list-style-type: none"> • Awareness is low—There is more work to be done on promoting breastfeeding in a coordinated way on a national level—aware of the complexity of this • No cohesive centrally coordinated national breastfeeding promotion strategy, which is time-bound • Varied implementation and coverage of breastfeeding promotional activity across Scotland 	<ul style="list-style-type: none"> • No national breastfeeding promotion strategy as breastfeeding promotion is included in other strategies or pieces of work • Lack of oversight and monitoring of locally developed initiatives, although some nongovernmental strategies have national coverage
Coordination, Goals and Monitoring	<ul style="list-style-type: none"> • Unclear whether breastfeeding is a policy and strategic priority • Lack of agreed policy objectives and strategic framework; data collection lacks this framework • Local innovations remain local 	<ul style="list-style-type: none"> • Plan for Government (PFG) in place, but implementation plan requires ratification • Robust monitoring plan to be agreed upon for this PFG implementation plan 	<ul style="list-style-type: none"> • No National Breastfeeding Committee, as a result, no work plan exists as no active committee • Data do inform decision-making but no cohesive strategy, or single authority with oversight • Data quality improving but development required
Political will	<ul style="list-style-type: none"> • Lack of functional policy and coherent government-supported programming beyond mandating UNICEF UK BFI • Good practice is predominantly local; it is not joined up into nationwide, consistent evidence-based standards • Low confidence in the government's will to improve the breastfeeding context 	<ul style="list-style-type: none"> • Commitment to ongoing high-level post is always uncertain due to Government budget planning and secondment issues • Supportive statements from other officials support Ministers, Scottish Government policy and efforts are open to interpretation and may not necessarily support a cultural change to accepting breastfeeding as the norm • Needs to be an ongoing process accommodating new ministers 	<ul style="list-style-type: none"> • Lack of strong and clear political commitment for BF and clear action with timescales • Lack of evidence to show the impact and adherence to policies and programmes • Lack of strategic connection with child health—appear to be separate initiatives
Legislation and Policies	<ul style="list-style-type: none"> • No national action plan, with performance targets • The WHO Code has been adopted in legislation but does not include all provisions of the WHO Code nor provisions for a monitoring system, penalties for violations and reporting of violators • Risk assessments are not required by law for women returning to work who are breastfeeding 	<ul style="list-style-type: none"> • Current legislation does not include all provisions of the WHO Code and subsequent resolutions and is therefore not enforceable • UK has not ratified the ILO Maternity Protection Convention C183 • The Employment Rights Act 1996 and the Management of Health and Safety at Work Regulations 1999—do not refer explicitly to breastfeeding 	<ul style="list-style-type: none"> • WHO Code is not fully incorporated into English legislation; is not enforced/does not have an independent body responsible for monitoring and enforcing compliance • ILO Maternity Protection Convention is not ratified, although it meets some of the standards contained within it • concerns around breastfeeding when returning to work are a barrier to uptake and sustaining of breastfeeding

(Continues)

TABLE 3 (Continued)

BBF Gear	Gaps identified in the breastfeeding environment by BBF gear and country		
	Wales	Scotland	England
	<ul style="list-style-type: none"> Employers are not required to give paid breaks for breastfeeding/expressing 	<ul style="list-style-type: none"> There is no explicit legislation that protects and supports breastfeeding/expressing breaks at work or enables a breastfeeding employee to rest and this includes being able to lie down 	
Funding and Resources	<ul style="list-style-type: none"> No clear national breastfeeding funding stream or strategic lead Resource allocation unclear Funding is insufficient to reflect the importance and health impact of increasing breastfeeding initiation and supporting ongoing successful feeding 	<ul style="list-style-type: none"> Funding strong, but not core Scottish government funding Would be improved by strengthened monitoring systems to track funding supporting breastfeeding policy and practice Formal mechanism through which maternity entitlements are funded could be more accessible to professionals and public 	<ul style="list-style-type: none"> Lacks clear leadership or responsibility at a national level No national funding for: <ol style="list-style-type: none"> A National Breastfeeding Programme The Unicef UK Baby Friendly Initiative The WHO Code monitoring and enforcement Breastfeeding-related education, training and programme delivery
Training and Programme Delivery	<ul style="list-style-type: none"> Good progress has been made in relation to national standards and guidance and the operation of a robust assessment process for UNICEF UK Baby Friendly standards However, UNICEF UK Baby Friendly does not have universal coverage in Wales Volunteer/peer support training and specialist provision are uncoordinated and inconsistent 	<ul style="list-style-type: none"> Minimal integration of training on breastfeeding across professional programmes Peer support is inconsistent across Scotland but training provided generally covers all essential topics No overall register of specialists with lactation consultant qualification, those in private practice or in the voluntary sector 	<ul style="list-style-type: none"> Teaching-learning outcomes do exist, but, in most cases, they are not complete or co-ordinated, with different professional groups from different institutions and facilities receiving different levels of training Partial progress has been made towards national standards and guidance through UNICEF UK Baby Friendly standards There is a need to protect and extend the support available to women in the community, at a local and national level
Research and Evaluation	<ul style="list-style-type: none"> No national survey asking breastfeeding questions Some data quality issues with the completeness of health board data No comprehensive, national monitoring of the Code or maternity protection legislation is in place 	<ul style="list-style-type: none"> Scotland-wide national population survey delivered, but complex and expensive; response rate not as high as hoped Some gaps remain in routine datasets despite developments Not currently able to report on breastfeeding after 6–8 weeks UNICEF UK BFI monitoring strong Maternity Protection and Code violation monitoring are inconsistent and unfunded; enforcement action therefore weak 	<ul style="list-style-type: none"> Infant Feeding Survey was discontinued in 2010; existing surveys do not provide the relevant routine depth of data and analysis Despite data set development, some gaps remain in routine data sets: data beyond 6–8 weeks/international comparators Issues remain with data quality, some areas data are not included with implications for data quality and usage

Abbreviations: BBF, Becoming Breastfeeding Friendly; BFI, Baby Friendly Initiative; ILO, International Labour Organization.

were even willing to truly discuss and consider them. Going through the BBF process with three countries simultaneously also highlighted the fact that policies and the development of national strategies are not solely governed by evidence, despite all countries practicing evidence-based health care and declaring an evidence-based approach to policymaking (Foreign & Commonwealth Office & Kemp, 2018). The country papers in this series provide further detail and discussion of the recommendations made (Brown et al., 2022; McFadden et al., 2022; R. Merritt et al., 2022).

Taking a critical theory approach to the BBF process across the three countries provides a lens through which to gain a greater understanding of the political nature of breastfeeding in opposition to the idea that it is simply a natural and nourishing way to feed an infant for the first 2 years of her life. As explained by Scambler (2001), a critical theory uses the construct of power and power relations through which to explain action and discourse in political, organisational and everyday life. Public health decision-making in 21st century Britain is ideologically driven by equality, equity and

TABLE 4 BBF recommendation themes presented by the BBF committees in each participating country

BBF Gear	BBF recommendation themes		
	Wales	Scotland	England
Advocacy Promotion	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Strengthening and coordinating breastfeeding messages across Scotland 	
Coordination, Goals and Monitoring Political will	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Reinforcing political will for breastfeeding among high-level decision-makers 	<ul style="list-style-type: none"> Strengthening national-level leadership and oversight to progress strategic, evidence-based, whole-system breastfeeding goals and actions for England, supported by key stakeholders
Legislation and Policies	<ul style="list-style-type: none"> Practical actions are delivered in Wales to embed good practice standards among 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 style="list-style-type: none"> Promoting a supportive return to the work environment for breastfeeding women through greater awareness and application of maternity, employment and child care provisions Strengthening, enforcing and monitoring legislation in Scotland that supports the International Code of Marketing of Breastmilk Substitutes and subsequent relevant WHA resolutions 	
Funding and Resources	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Ensuring consistent, long-term government funding commitments underpin Scotland's multicomponent breastfeeding strategy 	
Training and Programme Delivery	<ul style="list-style-type: none"> Strengthened and coordinated core education and training standards across multiagency partners working with mothers, babies and families in Wales to embed a consistent approach for quality improvement across all settings. These standards and approaches must be evidence-based and monitored 	<ul style="list-style-type: none"> Developing coordinated, consistent and evidence-based learning outcomes across education and training programmes, based on role-appropriate competency frameworks Ensuring families have equitable access to evidence-based infant feeding support when and how they need it through multicomponent, structured models of care 	<ul style="list-style-type: none"> Embedding coordinated, consistent, evidence-based and monitored learning outcomes and skills across education, training and development programmes, with role-appropriate, commercial interest-free content for all those working with mothers, babies and families Enabling all families access to evidence-based infant feeding support that is appropriately resourced, coordinated and monitored locally, when and how they need it
Research and Evaluation	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Ensuring reliable, comprehensive, explanatory and comparable data on Infant Feeding for monitoring and commissioning purposes 	<ul style="list-style-type: none"> Delivering reliable, comprehensive, explanatory and comparable data on infant feeding up to 2 years, with systematic mechanisms for use in monitoring, evaluation, planning and commissioning at local to national levels

Abbreviations: BBF, Becoming Breastfeeding Friendly; WHA, World Health Assembly.

evidence-based action and outcomes. This is clearly seen in the current political discourse concerning the COVID-19 pandemic. In reality, as shown through the BBF process, national policies and strategies are rarely developed solely on the evidence base. This is despite the United Kingdom having the National Institute of Clinical Excellence to support the use of high-quality evidence in such activities. Instead, policymakers are influenced by lobbyists, public opinion, traditions and social norms (Jones, 2001). Although policymakers may wish to deny this, formula milk companies have influence, even if their influence is often subtle and not based on evidence. This unbalanced influence creates clearly evidenced inequities and harm (Hastings et al., 2020; R. K. Merritt, 2018). Officially, ministries of health may argue that they are not influenced by the formula milk industry. However, through clever marketing the industry has managed to position formula milk as a women's right to choose, and that by proposing exclusive breastfeeding, governments and health boards are somehow taking women's choices away and stigmatising those women who choose not to breastfeed (Hastings et al., 2020). Governments need to go beyond simply promoting breastfeeding as a 'good thing'; they need to create supportive policies and programmes to enable the environments that parents need such as maternity benefits, regulation of marketing practices from the infant formula companies that go against the WHO International Code of Marketing of Breastmilk Substitutes ('the Code'), breastfeeding facilities in public spaces, desexualising of the breastfeeding body and understanding/addressing the experiences of mothers that find breastfeeding difficult (Baker et al., 2021; Hastings et al., 2020; Pérez-Escamilla, 2020; Tomori et al., 2020). The distortion between ideology and reality lends itself to the argument that the health claims of a political decision are prioritised through political and medical power and through the disempowerment of the nonparticipants (often the public and the nonmedical professions). Hence, the need for strong advocacy on behalf of the public by action-orientated groups and organisations such as the Breastfeeding Network, La Leche League, Baby Milk Action, IBFAN UK, World Breastfeeding Trends initiative and UNICEF UK. These groups, however, are too often countered by lobbyists with greater power through wealth and political alliance, such as the baby milk formula manufacturers. This lens can be applied to the process of discourse and decision-making during the BBF process across the three countries that can be exemplified in three ways.

1. *The decision-making around the constituency of the country BBF committee varied among the three countries:* Each country had an equal opportunity to set up its own BBF committee with terms of reference and guidance suggested by the BBF global group from Yale University. Each BBF team included members of the Kent research team. In Scotland, the breastfeeding lead for the nation set the agenda for wide inclusion from academics, service providers across Scotland, NGOs supporting breastfeeding such as the La Leche League and UNICEF UK, the Scottish breastfeeding network that directly supports women to breastfeed and policymakers resulting in a broad-ranging committee of 26
2. *The timing of meetings and extent of the debate was also variable between the countries:* In Scotland, a total of four face-to-face meetings took place over the study period and one meeting was held via email and phone conversations. The face-to-face meetings were held in a public building for a whole day allowing for travel from remote areas of Scotland with the provision of refreshments and scope for small group work. In Wales, five face-to-face meetings took place similarly in a public building accessible readily via public transport with available space for small group interaction and with each meeting being held over a whole day it also allowed for participants from across Wales to attend with appropriate hospitality. In England, five face-to-face meetings also took place over 3 h each. These were each held in a government building in one room, often with little space for small group work. Refreshments were available but meetings had to end promptly as they were in a government building. On one occasion the meeting was cut short by a fire alarm and could not be resumed due to the unavailability of alternative space.
3. *The process of the meetings and therefore the quality and time for the discussion also varied from country to country:* In Scotland, the breastfeeding lead for the nation had considerable influence on the policy process in Scotland and was understandably proud of the success of breastfeeding being part of the programme for government with its own funding stream. The discourse was framed within this 'success story' and a desire to bring greater health improvement and equality to Scotland within a context of the perceived power of Westminster. In Wales, the discourse was driven more by the inequality agenda, by a public health ideology that the varying breastfeeding rates across Wales are caused by inequity and social disadvantage. There was a leaning towards advocacy for women and a strong focus on multicomponent, strategic and evaluated systems in Wales, moving away from a more individual-based approach driven through the participation of the academics and the NGOs. There was also a discourse around the independence of Wales from wider UK processes such as the UNICEF UK Baby Friendly accreditation that was driven by cost to service providers and government. In England, the discourse was framed by governmental demand and expectation for return on investment and cost-effectiveness. The briefings and recommendations produced by the Gear Teams were tightly controlled by Public Health England in England with multiple iterations being monitored and reworded to 'fit with policy' unlike Scotland and Wales that engaged in accuracy and validity checks but resisted editing the original discourse. In England, there was

also some resistance from a professional organisation towards the UNICEF UK Baby Friendly accreditation process that drew the discourse towards a professional agenda rather than the need to meet the needs of babies and families. These different approaches to the BBF process inevitably led to discourses where unequal distribution of actors was fully heard, especially the voice of the public. The resulting Gear Scores and recommendations for each country display these disparities that are a 'natural' part of policy decision-making that can lead to differing priorities for government. At the end of the BBF process, Scotland and Wales presented the findings and recommendations to their respective health ministers and placed the recommendations in the public domain. To date, the recommendations for BBF England have not been presented or accepted ministerially, demonstrating the power differential between national and devolved governmental systems. Arguably, this has partially resulted from the extensive engagement ministers from Westminster were having around Brexit at the time that BBF recommendations were being agreed upon, followed by a general election and the onset of the global COVID-19 pandemic in early 2020 that then put a hold on many policy processes. The two devolved governments, while sharing these other major concerns, were able to address the breastfeeding recommendations outside of the power of Westminster.

10 | CONCLUSIONS

To conclude, given the public health evidence for the promotion, protection and support of breastfeeding across a nation of three countries where none have breastfeeding rates that meet WHO recommendations, has the BBF process had any impact? We would argue that the process itself stimulated all three countries to engage in a series of high-level discussions that have the potential to influence political will to change the breastfeeding environment through a process of prioritisation of policy processes and investments in future implementation science. The recommendations resulting from each country's scoring from the Gear Model, (see Brown et al., 2022; McFadden et al., 2022; R. Merritt et al., 2022) and evidence from other sources, including stakeholder interviews and media analysis, arrived at different priorities for each country. The differences in the approach to the policy process were observed and to some extent guided by the BBF GB committee as the governing body. It was however of interest to note through a critical theory lens how the policy process for public health and breastfeeding was managed and how the discourse in each country was framed by different drivers and involvement of different participants. Subsequent to the recommendations being made to the country policy advisory bodies a number of actions have been implemented. For example, based on the BBF recommendations to implement the structured accreditation programmes such as the UNICEF UK Baby Friendly standards across England, NHS England have included this in the NHS Plan (NHS England, 2020) and all maternity, community and neonatal units in England are expected to work towards UNICEF UK

Baby Friendly accreditation by 2024. This will represent a huge advance in professional training and understanding across the NHS that can be translated into breastfeeding support for parents. This has also been agreed upon in Wales. In terms of data and monitoring, there has been no decision to return to the UK-wide infant feeding survey but there are ongoing improvements in NHS Digital that could improve the quality and level of infant feeding data collected across the NHS in England, for example. This should provide a method for analysing trends in breastfeeding and provide data for much larger observational studies of breastfeeding and its association with various health-related conditions and associated costs to the NHS. This will be of specific significance in the years following the COVID-19 pandemic when there remains much to learn about the effect of breastfeeding on the infant immune system in relation to new viruses and their variants. Support for women through breastfeeding networks and support groups has been acknowledged as valuable at a policy level through the funding of organisations such as the Breastfeeding Network to continue their work in England. Further funding of £50m has also been agreed in England to provide wider community support and interventions for breastfeeding. The further actions from this at the time of writing have not yet been decided by the government and are under consultation.

The answer to our question, does implementation science work, is limited by the prevailing circumstances that prevent a repeat of the BBF process in Great Britain. Implementation science can only be as effective as the evaluation of the actions implemented allow. To date, it has not been feasible to initiate the next stage of BBF in Britain, which involves repeating the process to compare the country's scores and degree of achievement in scaling up within 5 years of BBF. It is our intention to find the means and the political will to continue the BBF process across Great Britain and to establish the health and social value of improving the environment for promoting, protecting and supporting breastfeeding.

AUTHOR CONTRIBUTIONS

Sally Kendall designed the study based on the Yale protocol developed under the leadership of Rafael Pérez-Escamilla. Sally Kendall, Tamsyn Eida and Rowena Merritt collected, analysed and interpreted the data with the BBF committee members across the three participating countries. Sally Kendall drafted the manuscript. All authors revised the manuscript critically for important intellectual content and approved the final version.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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