Review and Evaluation of

Breastfeeding in Ireland –

A 5 year Strategic Action Plan 2005 - 2010

February 2014

A report developed for the Health Service Executive by the Institute of Public Health in Ireland.

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Executive Summary

Breastfeeding in Ireland - a Five Year Strategic Action Plan was published as government policy on the promotion, support and protection of breastfeeding by the Department of Health and Children in 2005. Responsibility for overseeing its implementation was transferred to the Health Service Executive (HSE), a National Breastfeeding Coordinator and a National Breastfeeding Strategy Implementation Committee. The HSE commissioned the Institute of Public Health in Ireland (IPH) to conduct a Review and Evaluation of the Strategic Action Plan in 2013.

There are seven chapters in this Review

Chapter 1: Contextualises the Review within Irish health policies and structures and incorporates learning from previous relevant national and international policies and their reviews.

Chapter 2: An overview of the methods employed in the Review.

Chapter 3: An assessment of the high level targets of the Strategic Action Plan with regard to data collection, breastfeeding initiation and duration rates, coverage of the Baby Friendly Hospital Initiative (BFHI) and the appointment of regional breastfeeding coordinators.

Chapter 4: A review of the functioning of the National Breastfeeding Strategy Implementation Committee (NBSIC).

Chapter 5: An assessment of progress on the 44 actions in the Strategic Action Plan based upon documentary evidence of outputs as well as subjective assessments of progress gained through a process of engagement with lead agencies and stakeholders relevant to breastfeeding.

Chapter 6: A literature review which considers the evidence for what works in the promotion, support and protection of breastfeeding based on international and Irish studies.

Chapter 7: Recommendations to inform future policy.

Breastfeeding plays an important role in supporting child health and development and protecting children from communicable and non-communicable disease. As Ireland faces significant population health challenges including obesity and chronic disease, attention must

focus on laying the foundations for health in a child's earliest years - yet our breastfeeding rates continue to compare poorly with many European countries. Enhancing Ireland's breastfeeding rate is a long-term population health commitment. A 2003 interim review of the 1994 breastfeeding policy noted that targets for initiation and duration were not achieved. Implementation deficits were evident in terms of health information systems, progressing breastfeeding at community care level and in enhancement of positive portrayals and attitudes within Irish services and wider society. The content of this Review was informed by reviews of breastfeeding policies across the UK as well as European and international guidance on the promotion, support and protection of breastfeeding.

The 2005 Strategic Action Plan set out five overarching goals, 18 objectives and 44 actions to provide for more effective promotion, support and protection for breastfeeding within the health services and at a wider societal level. The overarching goals refer to supporting families with informed infant feeding decisions, the development and implementation of evidence-based policy in health services, community support and action, supportive public policy and legislation and wider societal recognition and facilitation of breastfeeding mothers.

Data analysis was undertaken using the National Perinatal Reporting System (NPRS), HSE administrative data, and the Growing Up in Ireland Longitudinal Study of Children (GUI) to assess the targets for breastfeeding initiation and duration. Published data from the Infant Feeding Survey was also considered.

A 22% increase in births occurred between 2005 and 2010 and there was a significant change in the ethnic/national diversity of mothers. Over the term of the Strategic Action Plan (2005-2010), the rate of any breastfeeding[1] on discharge from hospital/within the first 48 hours after birth increased from 48% to 54%. The rate of exclusive breastfeeding on discharge from hospital increased from 44% to 46%. The overall target for an annual two percentage point increase in breastfeeding initiation was not achieved for either any or exclusive breastfeeding. The target for an annual four percentage point increase in breastfeeding initiation among lower socio-economic groups 5 and 6 was achieved. Two significant milestones were noted. In 2007, any breastfeeding became the predominant type of infant feeding on discharge from

[1] Any breastfeeding refers to the sum of exclusively and partially breastfed babies.

hospital in Ireland and in 2011 rates of exclusive breastfeeding exceeded rates of artificial feeding. Increases in rates of any breastfeeding were driven by increases in partial/combined feeding which doubled over the term. Unemployed women reported the lowest level of breastfeeding. Progress in rates of breastfeeding initiation at national level and particularly for socioeconomic groups 5 and 6 were significantly driven by changes in the nationality of mothers giving birth over the term.

Current information systems did not allow for an assessment of the national target for annual increases in breastfeeding duration. Analysis of nationally representative data from GUI provided a 'snapshot' of breastfeeding duration for infants born in Ireland in 2007/2008. Of those women who initiated breastfeeding half were still breastfeeding at 3 months and a quarter were still breastfeeding at 6 months with a sharp drop-off at the six month point. Among mothers who undertook partial breastfeeding soon after birth, a sharp drop-off in breastfeeding was observed within the first 3 months. Breastfeeding duration in Ireland fell considerably short of World Health Organization recommendations on exclusive breastfeeding for the first six months. Around 97% of mothers of 9 month olds reported that their infant had received an infant formula product at some stage.

The target for 100% participation[2] of maternity hospitals in the Baby Friendly Hospitals Initiative by 2010 was not reached. Of the 20 maternity hospitals in operation in 2010, two were not participating in BFHI. However, 100% participation was achieved between 2005 and 2007. In 2005, around one in seven babies born in Ireland were born in a designated Baby Friendly hospital.[3] By 2010, this had increased to around one in three babies. The target for 50% of births occurring in a designated Baby Friendly hospital was not achieved.

There was no progress with regard to the target to appoint ten regional breastfeeding coordinators.

A review of the functioning of the NBSIC was undertaken, informed by a documentary review and interviews with committee members. Delayed establishment of national

[2] Participation refers to involvement at any level including certificate of commitment, membership or externally assessed as meeting the Baby Friendly criteria (i.e. designated).
[3] For the purposes of the analysis a hospital was considered designated if it had been externally assessed as fully meeting the Baby Friendly criteria or was in the process of re-designation.

governance and leadership structures relating to the implementation of the Strategic Action Plan was noted. The effectiveness of the committee was hampered by a lack of priority and engagement on breastfeeding issues at many levels and in certain sectors within and outside the HSE. Underdeveloped regional structures to support implementation presented a significant barrier. The committee oversaw the advancement of several aspects of the Strategic Action Plan including standardised infant feeding policy in maternity services, enhanced information, education and support resources, enhanced training and the coordination of approaches within the leaderships in the community-led, BFHI and health service settings. Committee members identified the need for future policies to be underpinned by strong high level government commitment and for breastfeeding issues to be embedded as a priority across a range of health services.

An overview of progress with the 44 actions was devised based on a blend of objective and subjective data sources. Objective measures of progress included documentary evidence of relevant developments in policy, resources, research and practice allied to the actions. Subjective measures of progress were attained through a process of structured engagement with lead agencies named in the Strategic Action Plan as well as identified stakeholders. A series of interviews and an online survey explored barriers and enablers to progress and invited stakeholder views on future priorities. Assessment of progress with the actions of the Strategic Action Plan was challenging as there was no pre-defined monitoring framework and few specific and measurable indicators of progress. There was little documentary evidence of what constituted routine practice in breastfeeding promotion, support and protection at the start and end points of the Strategic Action Plan and a paucity of evaluation or audit data.

The most significant achievements of implementation relate to:

- the development of standardised policy to guide consistent service development and monitoring within HSE maternity services
- enhancements in training for nurses and midwives
- the expansion of appropriately trained community-led peer support programmes
- the development of continually refined media messages to promote breastfeeding
- the development of more consistent and readily available information including the national breastfeeding website.

The most significant deficits in implementation relate to:

- incomplete dissemination of national policy to the 'coalface'
- the non-appointment of regional coordinators
- stalled development of fit-for-purpose data collection systems relating to breastfeeding duration and evaluation/audits of practice
- minimal impact on infant feeding cultures among Irish women
- underdeveloped engagement with fathers/grandmothers within breastfeeding promotion and support
- underdeveloped engagement with implementation by key departments and within public health, maternity and child health service leadership contexts and clinical specialties.

Efforts to enhance breastfeeding practice in primary care, paediatric and special neonatal care settings were evident but these were not underpinned by a clear long-term resource commitment or a strategy for expansion and development. Concerns were expressed about the governmental priority afforded to breastfeeding and the appropriateness of assigning the function solely to the HSE in light of the cross-sectoral approach needed to achieve meaningful change. Implementation relied on considerable voluntary effort working with constrained budgets. At maternity service level pressures relating to staff time and availability were perceived as a major impediment to enhancing practice in breastfeeding support. The majority of stakeholders considered that while public attitudes had improved somewhat, breastfeeding is still not the cultural norm in Ireland.

Stakeholders considered that progress in addressing inequalities in breastfeeding was minimal. There was no standard practice in supporting fathers/partners and grandparents as part of social breastfeeding support networks. Managing commercial interest remains a significant issue with concerns over practice relating to advertising, sponsorship and the availability of formula. Progress appeared to have been made in relation to restricting the distribution of marketing materials within maternity hospitals. Marketing activities by manufacturers of infant formula and follow-on milks were considered significant in influencing infant feeding decisions.

The literature review undertaken for this Review focussed principally on evidence of effective policies and practices in breastfeeding promotion, support and protection. Findings from several systematic reviews were synthesised along with an appraisal of published studies. Determinants of breastfeeding in Ireland were related to the cultural, social and economic circumstances of the mother as well as aspects of maternal age, education and self-efficacy. Internationally, evidence of effective interventions was principally limited to health service settings. Evidence relating to broader public policy, supportive environments, workplace and community action was lacking. There was a heavy reliance on international evidence and transferability of findings may be an issue. Evidence on how to influence breastfeeding intent and initiation was incomplete. Appropriate antenatal discussion that incorporates family showed some effectiveness, as did antenatal peer counselling. A range of studies confirmed the effectiveness of the BFHI as a means to improve breastfeeding outcomes within the maternity hospital setting. Breastfeeding support provided by appropriately trained health professionals or peer counsellors operating in a scheduled face-to-face manner has proven effectiveness in improving breastfeeding duration and exclusivity. Training and continued education of health professionals was also associated with improved breastfeeding outcomes. International studies showed that marketing of breast milk substitutes through discharge packs was associated with a negative effect on breastfeeding. A number of promising interventions for enhancing breastfeeding in the neonatal intensive care units were highlighted.

A wide range of future priorities were identified by stakeholders. Integrating breastfeeding as a priority within health and children's departments, agencies and services and strengthening governance arrangements was recommended. Development of enhanced information, reporting and research evaluation mechanisms was also considered important. A continued focus on appropriate staffing levels and skills in maternity and primary care/ community settings was seen as critical. There was an aspiration among stakeholders to integrate breastfeeding promotion more strongly into education and media campaigns. There is scope for enhanced action on healthy infant feeding within the new policy frameworks *Healthy Ireland – A Framework for Improved Health and Wellbeing 2013 – 2025* and *Better Outcomes Brighter Futures – the National Policy Framework for Children 2014 – 2020.*

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Glossary

Breastfeeding in Ireland: A Five Year Strategic Action Plan (2005) endorsed the World Health Organization (WHO) definitions of exclusive (2003) and partial (2001) breastfeeding as those to be applied in assigning targets related to breastfeeding duration in Ireland. The WHO definitions are cited in *Breastfeeding in Ireland: A Five Year Strategic Action Plan* (2005) and the *National Infant Feeding Survey* (2008).

The agreed definitions of the WHO (2003) relevant to breastfeeding are:

Breastfeeding: The child has received breast milk (direct from the breast or expressed).

Exclusive breastfeeding: The infant has received only breast milk from his/her mother or a wet nurse, or expressed breast milk, and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines.

Predominant breastfeeding: The infant's predominant source of nourishment has been breast milk. However, the infant may also have received water and/or water-based drinks (sweetened and flavoured water, teas, infusions); fruit juice; oral rehydration salts; drops and syrup forms of vitamins, minerals and medicines; and ritual fluids (in limited quantities). With the exception of fruit juice and sugar-water, no food-based fluid is allowed under this definition.

Artificial feeding: Feeding an infant on breast-milk substitute.

Bottle-feeding: Feeding an infant from a bottle, whatever is in the bottle, including expressed breast milk, water, formula.

Complementary feeding: The child is receiving both breast milk and solid (or semi-solid) food.
One further definition has been added (WHO, 2001):
Partial breastfeeding: The infant receives some breastfeeds, and some artificial feeds, either milk or cereal or other foods (WHO/EURO 2001).

Abbreviations and Acronyms

ALCI	Association of Lactation Consultants in Ireland
AMNCH	Adelaide and Meath Hospitals incorporating the National Children's Hospital
BFCI	Baby Friendly Community Initiative
BFHI	Baby Friendly Hospital Initiative
BFI	Breastfeeding Initiative
BFH	Baby Friendly Hospital
BNF	Birth Notification Form
CI	Confidence Intervals
CSO	Central Statistics Office
DCYA	Department of Children and Youth Affairs
DoH	Department of Health
DoHC	Department of Health and Children
DHSSPS	Department of Health, Social Services and Public Safety
DPH	Director of Public Health
DPHN	Director of Public Health Nursing
EBM	Expressed breast milk
ESRI	Economic and Social Research Institute
EU	European Union
FSAI	Food Safety Authority of Ireland
GP	General Practitioner
GUI	Growing Up in Ireland – the National Longitudinal Study of Children
HCP	Healthcare Professional
HIV	Human Immunodeficiency Virus
HSE	Health Service Executive
IBCLC	International Board Certified Lactation Consultant(s)
ICT	Information and Communications Technology
ICGP	Irish College of General Practitioners
IFS	Infant Feeding Survey
IIFAS	Iowa Infant Feeding Attitude Scale
IT	Information Technology
IPH	Institute of Public Health in Ireland
KPI	Key Performance Indicator

LHO	Local Health Office
MN-CMS	Maternal and Newborn Clinical Management System
NBS	Newborn Bloodspot Screening
NBSIC	National Breastfeeding Strategy Implementation Committee
NCHD	Non-Consultant Hospital Doctor
NGO	Non-Governmental Organisation
NICE	National Institute for Health and Clinical Excellence
NICIS	National Immunisation and Child Information System
NICU	Neonatal Intensive Care Unit
NPRS	National Perinatal Reporting System
NUIG	National University of Ireland Galway
PCCC	Primary, Continuing and Community Care
PFL	Preparing for Life
PHN	Public Health Nurse
RCT	Randomised Controlled Trial
SC	Social Class
SEG	Socioeconomic Group
SPHE	Social, Personal and Health Education
TCD	Trinity College Dublin
UK	United Kingdom
US	United States
WHA	World Health Assembly
WHO	World Health Organization
WIC	Women, Infants and Children (US programme)

Chapter 1. Introduction

1.1 Context

'Infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Thereafter, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond.'
(WHO and UNICEF, 2003)

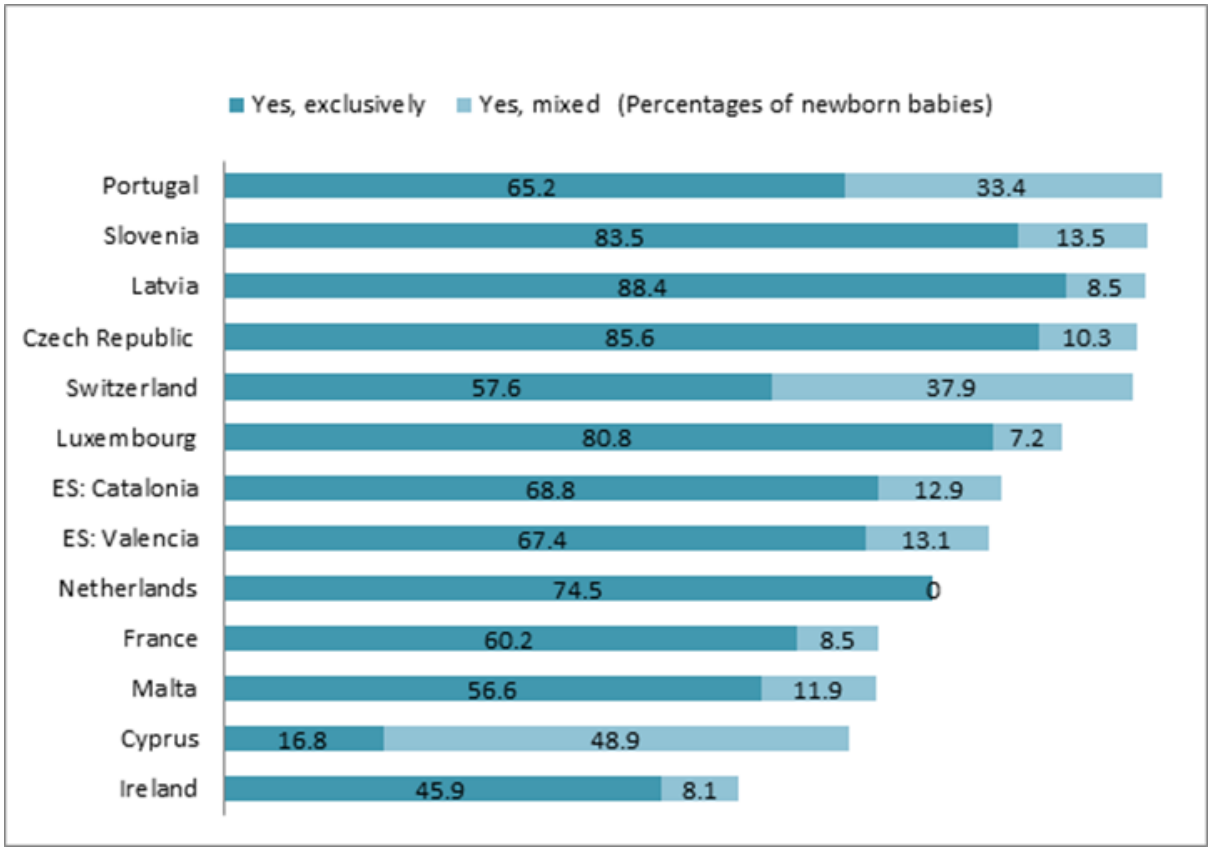
The Global Strategy for Infant and Young Child Feeding adopted by all World Health Organization (WHO) member states at the World Health Assembly in 2002 provides a basis for public health initiatives to protect, promote and support breastfeeding (WHO and UNICEF, 2003). Breastfeeding is the biologically normal way to provide infants with appropriate nutrition and weight gain as well as support child health and development. Breastfeeding also plays an important role in protecting infants from significant communicable and non-communicable disease. Recent analyses of infant feeding profiles in England demonstrate a clear correlation between higher rates of breastfeeding and lower rates of inpatient admission of infants under one year for respiratory infection, wheeze/asthma, eczema, otitis media and gastroenteritis (Department of Health England, 2013).

Longitudinal studies now provide additional evidence supporting the potential role of breastfeeding in conferring long-term health. A systematic review of the long-term impacts of breastfeeding concluded that there was evidence for the importance of breastfeeding in the prevention of a number of chronic diseases in adulthood including hypertension and diabetes (Horta and Victora, 2013). Increasing obesity, chronic disease and life expectancy have brought a focus to building the foundations for lifelong health through optimal health and development in the early years. International studies, as well as studies in Ireland, note the critical role of early years nutrition in the prevention of childhood and consequent adult overweight and obesity (Department of Health and Children, 2005; Arenz et al, 2006; McCrory and Layte, 2012). While the role of breastfeeding in the protection and promotion of child health is well recognised, there is some evidence to suggest that breastfeeding may be important in the wider context of other domains of child development including children's

capacity to learn and achieve academically. This has featured in analysis of young children in Ireland (McCrory and Layte, 2010). Linked to this has been a recent surge of interest in the role of breastfeeding as a means to address societal and health inequalities and to enhance social mobility which is reflected in some government policy relating to the early years (Sacker et al, 2013; The Scottish Government 2011).

Breastfeeding rates in Ireland are low in comparison with many other European countries as demonstrated in Figure 1.1.

Figure 1.1: Distribution of exclusive and mixed breast feeding for the first 48 hours in 2010



Source: European Perinatal Health Report (EuroPeriStat with SCPE and EUROCAT, 2013).

In 2013, the Health Service Executive (HSE) engaged the Institute of Public Health in Ireland (IPH) to conduct a Review and Evaluation of the current breastfeeding action plan – *Breastfeeding in Ireland – A Five Year Strategic Action Plan* (Department of Health and Children, 2005). The purpose of the Review was to assess progress with the implementation of the Strategic Action Plan – the achievement of targets and the barriers and enablers

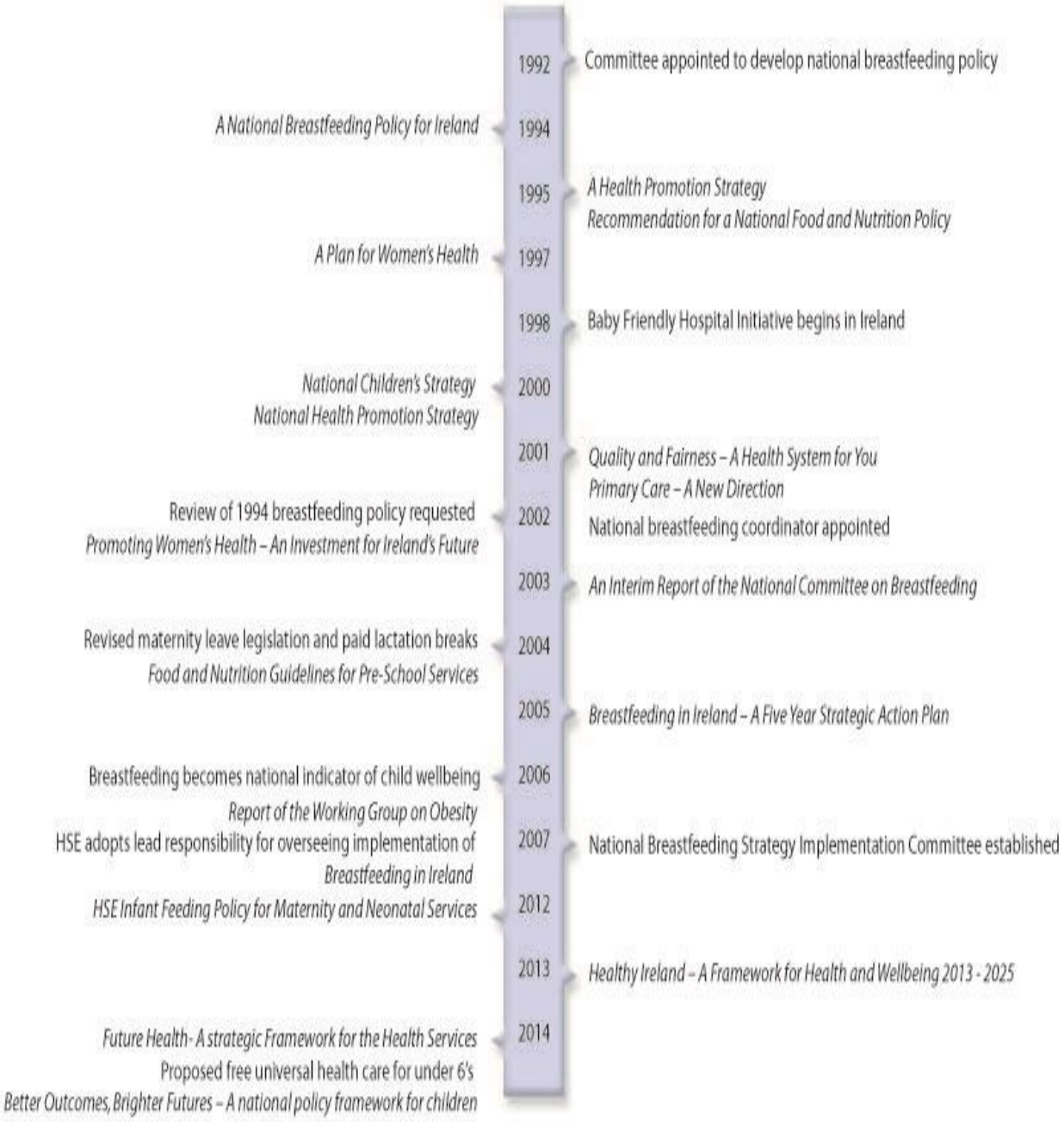
experienced within implementation. A full outline of the project aims, objectives and methods is provided in Chapter 2.

This introductory chapter begins by placing the Review within the broader context of evolving population health policies and structures in Ireland. The main policy developments and elements of health system reform relevant to the implementation of the Strategic Action Plan are highlighted. In addition, historical learning from previous national, as well as international policies and their reviews are captured. This learning informed the design of this Review. This provides a necessary starting point and context to findings presented in subsequent chapters.

1.2 Breastfeeding in Ireland: A timeline of changing policies and structures

Enhancing Ireland's breastfeeding rate and the experience of breastfeeding families is a long-term population health commitment that has in reality operated under a continuum of policies and strategies relating to infant feeding, child and maternal health. In looking forward, it is first necessary to understand the experiences with previous policies and their reviews. This approach facilitates both a long-term view of breastfeeding policy in Ireland and allows for enhanced experiential learning rooted in the Irish setting. With this in mind, this chapter begins by presenting the policy timeline relating to breastfeeding in Ireland, starting from the appointment of a national committee to develop a breastfeeding policy in 1992. An overview of the policy timeline is presented in Figure 1.2.

Figure 1.2: Policy timeline – breastfeeding policy in Ireland 1992 to present



The *Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding* (UNICEF and WHO, 1990) called for the establishment in all member nations of a multisectoral national breastfeeding committee and the appointment of a national breastfeeding coordinator. While the Minister for Health appointed a committee to develop a national breastfeeding policy in 1992, a national coordinator was not in place until 2001. There was a period in which the national coordinator post was vacant.

A National Breastfeeding Policy for Ireland (Department of Health and Children, 1994) was published with targets for an overall breastfeeding initiation rate of 36% by 1996 and a rate of 50% by the year 2000.

In 2002 a National Committee on Breastfeeding was established by the Minister for Health. The terms of reference of the committee were to review the 1994 policy including engagement with relevant organisations to establish commitment and advise on best practice. In addition, the committee was required to report recommendations to the Minister on what further action is required at national, regional and local level to improve and sustain breastfeeding rates. An *Interim Report of the National Committee on Breastfeeding* was published in May 2003 (Health Promotion Unit, 2003). The report documented the findings of a review process undertaken by the committee. This review was principally informed by the expert views of the committee and its three subgroups as well as 40 submissions received as part of a public consultation process. Key findings from this review are summarised in Appendix 1.

This Review of the Five Year Strategic Action Plan (2005) recognises that implementation took place in a changing health system, social and economic environment. Significant changes occurred in government structures related to the development of health policy as well as the development, management and monitoring of health services. The Department of Health and Children (DoHC) became the Department of Health (DoH), and the HSE and a new department was formed, the Department of Children and Youth Affairs (DCYA). In tandem with the ongoing development and review of policies, notable changes occurred in key health system structures relating to the leadership, position and implementation of breastfeeding policy. An overview of the main changes in health structures, as relevant to the

position and implementation of breastfeeding policy in Ireland is further detailed in Chapter 4.

This Review takes into account these changes, as well as wider societal changes, in terms of its assessment of the implementation of the current breastfeeding Strategic Action Plan and in terms of placing recommendations for any future breastfeeding policy within the context of current and future health system structures.

1.3 International perspectives

1.3.1 Learning from reviews of breastfeeding policies in similar countries

A comprehensive assessment of international breastfeeding policies did not form part of the specification for this particular Review. However, learning from reviews undertaken in other similar countries was viewed as a potentially important informant to the design and quality of the Review being undertaken in Ireland. In recognition of the wide differences in breastfeeding cultures and support services between European countries, it was considered that reviews of the implementation of UK-based breastfeeding policies would be of most relevance. A summary of key learning from reviews of UK-based breastfeeding policies is included below.

In Northern Ireland, a Breastfeeding Strategy Review Group was convened to examine progress with the recommendations of *The Breastfeeding Strategy for Northern Ireland* (Department of Health and Social Services, 1999). This 2008-2009 review comprised the following components:

- Consultation with identified 'agents for action' in the strategy.
- Focus groups with mothers of babies aged under one year who were breastfeeding or who had ceased breastfeeding earlier than intended in order to include a personal and public involvement perspective.

A Review of the Northern Ireland Breastfeeding Strategy (Gossrau-Breen et al, 2010) provides a useful overview of current practice and policy in breastfeeding in the region. In

addition the review also identified those areas needing further improvement in relation to the original nine action points, namely:

- coordinating activities
- commissioning services
- collecting regional information
- research
- training health professionals
- supporting special needs infants and their mothers
- raising public awareness
- limiting promotion of artificial milks
- legislative change.

The findings from the Northern Ireland review informed the development of *Breastfeeding – A Great Start – A Strategy for Northern Ireland 2013-2023* (Department of Health, Social Services and Public Safety (DHSSPS), 2013) which aims to ensure that by 2025, 70% of all infants will be breastfed by one week after birth and 40% of all infants will still be breastfed at six months.

Across the UK, practice in breastfeeding promotion and support is guided by the National Institute for Health and Clinical Excellence (NICE) *Evidence into Practice briefing - promotion of breastfeeding initiation and duration* (Dyson et al, 2006). This briefing was formulated through the integration of published scientific literature with feedback from 516 stakeholders including practitioners and representatives of service users. Stakeholder input was gathered through a series of fieldwork meetings and workshops as well as an electronic questionnaire. Similar to the process undertaken in this Review, the stakeholder engagement focussed on an examination of barriers to effectiveness and identification of strategies for change (McFadden et al, 2005; Dyson et al, 2006).

In Scotland, breastfeeding policy is primarily positioned within the wider perspective of maternal and infant nutrition. The policy framework *Improving Maternal and Infant Nutrition: A Framework for Action* (The Scottish Government, 2011) stresses the importance of concentrating efforts on the early years as a means to enhance population health. The framework is also integrated within the wider *Early Years Framework* (The Scottish

Government, 2008) which focuses on ensuring that health outcomes for children are improved and health, social and educational inequalities are reduced.

1.3.2 Embedding international policy directives and guidelines

The Global Strategy for Infant and Young Child Feeding (WHO and UNICEF, 2003) represents the high level global policy framework for infant nutrition and is therefore the backdrop for the direction of national breastfeeding policies including those in Ireland. The strategy recommends that:

- All governments should develop and implement a comprehensive policy on infant and young child feeding, in the context of national policies for nutrition, child and reproductive health, and poverty reduction.
- All mothers should have access to skilled support to initiate and sustain exclusive breastfeeding for six months and ensure the timely introduction of adequate and safe complementary foods with continued breastfeeding up to two years or beyond.
- Health workers should be empowered to provide effective feeding counselling, and their services be extended in the community by trained lay or peer counsellors.
- Governments should review progress in national implementation of the International Code of Marketing Breast Milk Substitutes, and consider new legislation or additional measures as needed to protect families from adverse commercial influences.
- Governments should enact imaginative legislation protecting the breastfeeding rights of working women and establishing means for its enforcement in accordance with international labour standards.

Protection, promotion and support of breastfeeding in European – a blueprint for action (European Commission, Directorate Public Health and Risk Assessment, 2008) outlines the main actions that national and regional plans should contain and implement with regard to the promotion, support and protection of breastfeeding. The blueprint document arose from a wider EU project which assessed the breastfeeding situation in some EU and associated countries in 2002 and in 2007. The report concluded that across all contributing European countries the rate of improvement was slow and results fell considerably short of global infant feeding recommendations. Exclusive breastfeeding rates at six months were lower than recommended throughout Europe. A common theme was that while policy development was

evident, many elements of established evidence-based practice were lacking. In particular the report noted that initiation of breastfeeding in Ireland, France and the UK, while showing improvement, were consistently lower than elsewhere in Europe. On a positive note, the report noted significant developments in terms of Ireland's progress with the development of policies, processes, monitoring, and education (Cattaneo et al, 2009).

The blueprint aimed to contribute to:

- Europe-wide improvement in breastfeeding practices and rates (with major increases in initiation, exclusivity and duration rates)
- A significant increase in the number of parents who are confident, empowered and satisfied with their breastfeeding experience
- Improved skills in promoting, supporting and protecting breastfeeding, thus enjoying greater job satisfaction, for the vast majority of health workers.

It was recommended that the blueprint findings and recommendations be taken into account within the development and/or revision of European member states national and regional breastfeeding policies, initiatives and plans. With this in mind, the findings of the blueprint informed the design of the Review in Ireland, the interpretation of findings from the Review, and the development of recommendations.

1.4 The current policy landscape: Breastfeeding in Ireland: A Five Year Strategic Action Plan, Healthy Ireland and Children's Policies

Primary responsibility for overseeing the implementation of the Government's breastfeeding policy *Breastfeeding in Ireland: A Five Year Strategic Action Plan* (DoHC, 2005) was assigned to the HSE in 2006. The mission of the Strategic Action Plan is to improve the nation's health by ensuring that breastfeeding is the norm for infants and young children in Ireland.

The Strategic Action Plan's actions are based on initiatives to provide more effective promotion, support and protection for breastfeeding both within the health services and at a wider societal level. The Strategic Action Plan set out five overarching goals, 18 objectives and 44 actions.

The goals of the Strategic Action Plan are as follows:

Goal 1 - All families have the knowledge, skills and support to make and carry out informed infant feeding decisions, particularly those least likely to breastfeed.

Goal 2 - The health sector takes responsibility for developing and implementing evidence-based breastfeeding policies and best practice.

Goal 3 - Communities support and promote breastfeeding to make it the normal and preferred choice for families in Ireland.

Goal 4 - Legislation and public policies promote, support and protect breastfeeding.

Goal 5 - Irish society recognises and facilitates breastfeeding as the optimal feeding method of infants and young children.

The Strategic Action Plan set targets in relation to data collection, breastfeeding initiation and duration rates, the Baby Friendly Hospital Initiative (BFHI) and the appointment of regional breastfeeding coordinators.

The National Breastfeeding Strategy Implementation Committee (NBSIC) was established in 2007 and was assigned responsibility to assist the National Breastfeeding Coordinator in monitoring the implementation and progress of the Strategic Action Plan.

There have been other significant developments in wider policies relating to public health and to children. Although breastfeeding receives no specific mention within *Healthy Ireland – A Framework for Improved Health and Wellbeing 2013-2025* (DoH, 2013), this recently published national public health policy recognises that achievement of real change in population health requires integrated multisectoral engagement embedded within a 'health in all policies' approach. Of particular relevance is the commitment to build better and more equitable population health through evidence-based programmes aimed specifically at a child's early years starting from their time in the womb. There is considerable scope for enhanced breastfeeding policy and practice to deliver on many aspects of *Healthy Ireland*.

Breastfeeding is integral to supporting child health and development in the context of evidence-based prevention and early intervention initiatives working with children and families. Other notable elements of *Healthy Ireland* of particular relevance to breastfeeding include:

- Commitment to develop a basic child health dataset.
- Recommendation 4.8 which aims to leverage the capacity of public health nurses to improve the health of local communities.
- Recommendations related to the ongoing development of Interagency Children's Services Committees.
- A commitment to address current levels of childhood and adult overweight and obesity.
- Recommendation 4.11 which commits to review and update public health laws and instruments to modernise and strengthen public health systems and functions.
- The development of a *Healthy Ireland* research plan and outcomes framework.
- The development of annual reports on health and wellbeing and health and wellbeing profiles at county level.
- Identification of the role of the agri-food sector in contributing to enhanced population health.

In parallel with the development of *Healthy Ireland*, DCYA has being developing an Early Years Strategy/Framework expected to be published in 2014. *Right from the Start - The Report of the Expert Advisory Group on the Early Years Strategy* was published in 2013. This recommended that the Strategy should improve breastfeeding rates by building on the progress already achieved as a result of the *Breastfeeding Strategic Action Plan 2005-2010* through a combination of hospital and community-based measures, including antenatal education, supportive health service policies, consistency of approaches by healthcare workers, provision of high quality support, progressive maternity leave policies and education and/or regulation of employers to provide facilities for nursing mothers (DCYA, 2013). A number of the other recommendations of the Expert Advisory

Group for the Early Years Strategy are highly relevant to the achievement of breastfeeding goals in Ireland, in particular recommendations to

- Ensure that all children receive the five core visits by public health nurses at 48 hours, three months, seven months, 12-18 months and 39-42 months
- Raise significantly the amount of public investment in young children and their families
- Provide access to free GP care to all children under the age of six
- Prioritise the raising of quality standards in early childhood services and put in place a national expert group to ensure child health standards are updated in line with evidence and best practice
- Review graduate training options for all professionals working with young children and their families and support continued professional development
- Ensure that the early years strategy is supported by strong coordination mechanisms between government departments including the appointment of a Junior Minister for the Early Years and a Cabinet sub-committee
- Child-proof government decisions and legislation
- Establish clearly the governance of child health and wellbeing services within the context of new organisational structures such as the Child and Family Agency and reconfiguration of the HSE, to ensure linkages are maintained and improved, with a focus on outcomes for children.
- Develop measurement tools, information-sharing and data systems to assess the quality and quantity of existing services including data collected by public health nurses relating to child development.

Better Outcomes Brighter Futures: The national policy framework for children and young people 2014-2020 (2014) recognises the benefits to children of improving breastfeeding rates among mothers. In this policy framework, the government commits to bringing a focus to early healthy development prioritising the under-2-year-olds. The government also commits

to strengthening prenatal and antenatal supports around the mother, addressing maternal health and wellbeing, and raising breastfeeding (and vaccination) rates in line with international norms.

1.5 Overview of the report

There are seven chapters in this Review. Each chapter concludes with a set of key points.

This introductory chapter (Chapter 1) has contextualised the Review within evolving population health policies and structures and incorporated historical learning from previous national, as well as international policies and their reviews.

Chapter 2: an overview of the methods employed in the Review. Further detail on methods is also featured within each subsequent chapter.

Chapter 3: an assessment of the achievement of the core targets of the Strategic Action Plan with regard to:

- data collection
- breastfeeding initiation and duration rates
- the coverage of the Baby Friendly Hospital Initiative
- the appointment of Regional Breastfeeding Coordinators.

Chapter 4: a review of the National Breastfeeding Strategy Implementation Committee based upon interviews and documentary review.

Chapter 5: an assessment of progress with the 44 actions set out in the Strategic Action Plan. The assessment is based upon both objective evidence of progress and findings from a structured process of engagement with lead agencies named in the Strategic Action Plan and wider stakeholders.

Chapter 6: a literature review which considers the evidence on what works in the promotion, support and protection of breastfeeding.

Chapter 7: recommendations based on the findings of the Review for consideration by the HSE and its National Breastfeeding Strategy Implementation Committee and other lead departments and agencies.

1.6 Key points

- Breastfeeding plays an important role in supporting child health and development and protecting children from communicable and non-communicable disease.

- As Ireland faces the significant population health challenge posed by obesity and chronic disease, attention must focus on laying the foundations for health in a child's earliest years.

- Rates of breastfeeding in Ireland within the first 48 hours after birth compare poorly with many other European countries.

- The policy landscape for supporting breastfeeding in Ireland includes a range of policies relating to infant feeding, child and maternal health and related health services. However, there is neither an overriding national maternity policy nor a national nutrition policy for children in place.

- A 2003 *Interim Report of the National Committee on Breastfeeding* considered the implementation of the 1994 national breastfeeding policy. This noted that the year 2000 breastfeeding target had not been achieved and highlighted implementation deficits in the domains of health information systems, progressing breastfeeding support at community care level and the enhancement of positive portrayal and attitudes towards breastfeeding in Irish services and society (see Appendix 1).

- The design and operation of this Review was informed by published reviews of the implementation of breastfeeding policies across the UK as well as European and international guidance on the protection, promotion and support of breastfeeding.

- *Breastfeeding in Ireland – A Five Year Strategic Action Plan*, published by the Department of Health and Children in 2005, is acting as government policy on breastfeeding in Ireland in 2014. Primary responsibility for overseeing the implementation of the Strategic Action Plan was assigned to the Health Service Executive in 2006.

- There is considerable scope for enhanced and effective breastfeeding support within the implementation of *Healthy Ireland – A Framework for Improved Health and Wellbeing 2013- 2025* and as part of *Better Outcomes, Brighter Futures – the National Policy Framework for Children 2014 – 2020.* Publication of Ireland's first early years strategy is expected this year.

Chapter 2. Methods

2.1 Objectives of the Review and Evaluation

The objectives of the Review and Evaluation were:

1. To review and evaluate progress in relation to the specific targets of the Strategic Action Plan.
2. To evaluate the progress of the National Breastfeeding Strategy Implementation Committee (NBSIC) in meeting its terms of reference and to make recommendations for its future. To assess progress with the Strategic Action Plan from the perspective of NBSIC.
3. To review and evaluate progress on the Strategic Action Plan objectives and actions with key stakeholders. To identify progress, enablers and barriers to implementation and make recommendations for future target areas.
4. To undertake a review of literature on evidence-based good practice in relation to the promotion, support and protection of breastfeeding.
5. To make recommendations to guide the development of a future breastfeeding strategy/policy.

2.2 Project team and management

The approach to the Review was based upon the invitation to tender document initially developed by the HSE. Tasks of the Review were organised into four phases and undertaken by an all-island project team based within IPH working closely with the HSE National Breastfeeding Coordinator.

Nine IPH project team meetings were held between August 2013 and February 2014 to coordinate and progress the Review. In addition, seven progress update meetings were held between the HSE National Breastfeeding Coordinator and/or NBSIC Chair, and the IPH Director of Policy, as project manager of the Review.

The IPH project team presented to NBSIC in September 2013 to familiarise the committee with the project plan and foster engagement with the Review process. A second presentation to the committee was made in January 2014 to present and discuss the interim findings of the Review.

2.3 Overview of methods: Review of policy targets

Progress made on high level targets of the Strategic Action Plan was assessed. The targets in question related to:

- Data collection
- Breastfeeding initiation and duration rates
- Coverage of the BFHI
- The appointment of regional coordinators

Data from the National Perinatal Reporting System (NPRS) were analysed to consider targets for breastfeeding initiation. Progress was assessed in terms of the achievement of targets specified in the Strategic Action Plan for the breastfeeding rate at 48 hours/on discharge from hospital. Data from the Growing Up in Ireland Longitudinal Study of Children (GUI) were analysed to consider targets for breastfeeding duration. The utility of data on breastfeeding duration collected through the HSE local health offices (LHOs) as part of HSE performance monitoring was assessed. While neither dataset proved suitable to monitor the specifics of the target in question, key findings from these assessments are presented. The Strategic Action Plan had proposed that at least half of all hospital births take place in designated Baby Friendly Hospitals (BFH) and that all hospitals would be participating in the initiative by 2010. An outline of the number and timeline for BFH designation in Ireland is presented based upon the BFHI in Ireland annual reports.

Further details on the methods used to assess these targets are available in Chapter 3.

2.4 Overview of methods: Review of the National Breastfeeding Implementation Committee (NBSIC)

The Review assessed the functioning of the NBSIC in relation to the working of the committee and progress with implementation of the Strategic Action Plan. The evaluation focussed on the advancement of terms of reference, and committee perspectives on the implementation of the Strategic Action Plan from 2005 to 2012. The approach adopted used a retrospective documentary review and qualitative data from in-depth interviews with a subset of NBSIC members. The documentary review was based on documents including Terms of Reference and meeting records. Interviews were with the Chair and three other members of NBSIC.

Further details on methods used in this section of the Review are presented in Chapter 4.

2.5 Overview of methods: Evaluation of progress in relation to objectives and action areas of Strategic Action Plan

This section of the Review assessed progress on the 44 actions of the Strategic Action Plan. The assessment was based on recording both what progress had been made, and the enablers and barriers to that progress. The assessment relied principally upon engagement with the National Breastfeeding Coordinator in conjunction with structured engagement with identified stakeholders. The engagement with stakeholders also explored the perceived effects of implementation and invited views with regard to recommendations for future actions. Fifteen semi-structured interviews were undertaken with representatives of lead agencies linked to key objectives and actions in the Strategic Action Plan. This comprised four face-to-face and 11 telephone interviews. An email link to an online survey was sent to a wider stakeholder group.

Further details on the methods used in this part of the Review are presented in Chapter 5.

2.6 Overview of methods: The literature review

The objective of the literature review was to undertake a review of national and international literature on infant feeding with regard to strategies and evidence-based best practice in relation to the promotion, support and protection of breastfeeding. A rapid review was undertaken to highlight evidence of what works to promote, support and protect breastfeeding. The review focussed principally on systematic reviews and key grey literature as well as publications from a defined sub-set of journals. The search period was January 2005-August 2013 to avoid duplication with work already considered during the development of the Strategic Action Plan. The focus of all literature searching was for information relating to determinants and factors that encouraged/discouraged breastfeeding, and interventions to improve initiation and breastfeeding duration. Further detail on the methodology employed in the literature review is provided in Chapter 6. An interim literature review was revised in conjunction with the HSE National Breastfeeding Coordinator and a final literature review was agreed in November 2013.

Chapter 3. Review and evaluation of targets

3.1 Introduction

The Strategic Action Plan identified a number of high level targets relating to data collection, breastfeeding initiation and duration rates, participation in the Baby Friendly Hospital Initiative and the appointment of regional breastfeeding coordinators (see Table 3.1). This Chapter assesses the extent to which these targets have been reached.

Table 3.1: Overview of targets in the Strategic Action Plan

Data collection target

Comprehensive, accurate and timely infant feeding Data Collection System to be developed in co-operation with the Programme of Action for Children, and form part of an overall child health information system. This is to be in place by the end of 2006. The breastfeeding data collected are to include linked information on the socioeconomic status of each mother-baby unit, as well as other demographic indicators known to influence breastfeeding.

Breastfeeding rate targets

Breastfeeding rate target at 48hours (or at discharge, whichever is earlier)

A sustained increase to be achieved in the overall national breastfeeding initiation rate of at least 2% per year, with an increase of 4% per year for socioeconomic groups 5 and 6. As well as applying nationally, this target is also to apply at maternity/hospital unit level.

Breastfeeding duration targets

A sustained increase to be achieved in the overall national breastfeeding duration rate of at least 2% per year, with an increase of 4% per year for socioeconomic groups 5 and 6 – measured at 3 or 4 months of age, at 6 months of age and at one year. This target is to apply at Health Service Executive Local Health Office (LHO) level also.

Target for the Baby Friendly Hospital Initiative

At least 50% of hospital births to take place in nationally designated Baby Friendly maternity hospitals with 100% participation in the Baby Friendly Hospital Initiative within the 5 year time frame of the action plan.

Target for the appointment of regional coordinators

Ten breastfeeding coordinators with a defined regional responsibility to be in post by October 2006.

3.2 Methods

Data collection target

Key data sources and contact persons were identified with the assistance of the National Breastfeeding Coordinator. Current sources of breastfeeding data in Ireland were identified from both health information systems and survey data. Published and unpublished material on the development of a Child Health Information System in Ireland was reviewed together with information from the newly formed Child Health Information Network and a regional coordinator for parent held child records. Future opportunities for the development of a comprehensive Child Health Information System, as initially envisaged within the Strategic Action Plan, were assessed.

Data sources used to assess breastfeeding rate target (initiation/duration)

Two primary data sources were employed to examine breastfeeding rates and duration in Ireland over the course of the Strategic Action Plan; these included the National Perinatal Reporting System (NPRS) and the infant cohort of the Growing up in Ireland (GUI) survey.

The NPRS is responsible for the processing, management and reporting of data on all births nationally. It records infant feeding method (documented as breast, combined or artificial) on discharge, or at 48 hours whichever is earlier, from maternity hospital/unit/domiciliary midwife care. The NPRS provides national population level data on all births occurring in the Republic of Ireland along with demographic and breastfeeding initiation data. It was therefore used as the principal source of data to assess the breastfeeding target at 48 hours/on discharge whichever is earlier (referred to in the Strategic Action Plan document as the breastfeeding initiation rate). The WHO definition of breastfeeding initiation described in the glossary does not strictly align with NPRS. A data request was developed and agreed which related to record level data on all live births (excluding early neonatal deaths) for the years 2005-2012. The data request included a range of variables of relevance to breastfeeding patterns and was developed and refined in conjunction with the IPH project team, National Breastfeeding Coordinator and the manager of the NPRS information system. Approval for the release of data to IPH for this Review was granted by DoH.

Record level data was also sourced from the first wave of the infant cohort of the GUI survey. This provides data on breastfeeding initiation and duration for babies based on the retrospective reporting of mothers when their infant was nine months of age. The data relates to infants born December 2007-June 2008. GUI is a longitudinal study following two cohorts, a cohort of circa 8,500 nine year olds and a cohort of circa 11,000 nine month olds. To date each cohort has produced two waves - the child cohort at nine years and at 13 years and the infant cohort at nine months and at three years. GUI data has the strength of being nationally representative and therefore allows for population level estimates. Results from analysis of GUI consider breastfeeding rates and behaviours measured over the course of the first nine months of a child's life. For some analyses these factors are considered according to different time points during the nine months including two days after birth to compare where possible with 48 hours/discharge rates in NPRS. Analyses were conducted only in the case of biological mothers of babies. A small number of cases were dropped (n=15) from the overall sample where respondents were unsure of breastfeeding duration. Valid responses on breastfeeding were obtained from 10,938 respondents.

IPH was provided with data on breastfeeding (2009-2012) routinely collected by HSE Public Health Nurses (PHNs) involved in developmental assessments throughout infancy and early childhood. Beginning in 2009, data collected at the immediate postnatal visit and the 3-4 month assessment has been collated at Local Health Office (LHO) level and sent on a quarterly basis to a national centre. A survey in the second quarter of 2011 found considerable variability across different geographic areas in the percentage of assessments; ranging from 48.8% to 100% (mean 85.4%) for the immediate postnatal visit and from 55% to 100% (mean 86%) for the 7-9 month visit. The system does not record data on socioeconomic group and breastfeeding rates at 6 months and 1 year that were elements of the national target on breastfeeding duration. Considerable gaps in this data were found whereby LHOs had provided incomplete or no data, making interpretation at a national and also annual level inaccurate. Therefore this source of data could not be used to assess breastfeeding duration.[4]

[4] The missing data is spread across the 16 quarters (2009-2012) and the 32 Local Health Offices (LHOs). Complete data was received from all the LHOs for 6 of these quarters. No partial data was been received in 2011-2012.

Published findings from the National Infant Feeding Survey were also used to assess patterns of breastfeeding duration in Ireland (Begley et al, 2008). This three-phase study was commissioned by the HSE and sought to determine the rate and duration of breastfeeding, the factors influencing women to breastfeed and the reasons women given by women for stopping breastfeeding. The survey collected data on breastfeeding rates at three stages: from birth to 48 hours, at 3-4 months and at 6-7 months. Sub-group analyses were conducted at the level of individual maternity hospital/unit/independent midwife, socioeconomic group, nationality and HSE LHO. The sample consisted of 1,826 women who completed a phase 1 survey at discharge from hospital unit/independent midwife or at 48 hours. A follow-up phase 2 survey took place at 2-3 months post-natally. In addition, qualitative focus groups with groups of mothers who were least likely to breastfeed in Ireland were also undertaken. Further details on methods can be found in Begley et al (2008:80).

HSE, NPRS and GUI datasets were stored on a password protected server and handled in line with current national data protection legislation. See Appendix 2 for further information on the available data on breastfeeding in Ireland.

Data analysis for assessing breastfeeding rate target (initiation/duration)

Given that the NPRS provides population level data, significance testing was not used for analyses. Results are presented as descriptive statistics and any observed differences in the data are considered to be real differences. In contrast to NPRS, GUI is based on a large sample of infants from the Child Benefit Register. Descriptive analyses and graphical displays illustrate rates of breastfeeding and other factors in the data. Inferential statistics examine associations between characteristics in GUI where relevant. Test statistics are presented along with confidence intervals and p-values where appropriate. Throughout the report increases, decreases and comparisons of data where noted can be read as statistically significant at least at the conventional 5% confidence level.

Findings from GUI should be interpreted considering some important caveats. Data is collected at one point in time and causal interpretations cannot be inferred. Breastfeeding behaviour is reported retrospectively by survey respondents when babies are nine months old, it is therefore possible that responses are subject to some inherent biases including social desirability and recall bias. The measure of mother's social class in GUI is derived from

household social class status which leads to an over-representation of higher social classes compared to individual level measures of social class (as per NPRS data).This may lead to biases in results presented according to social class categories. Finally, survey response rates varied according to background characteristics of respondents, with rates generally being lower among more socially disadvantaged groups. To account for this and other sampling biases, all results presented in this chapter are statistically adjusted, applying sample weights to ensure they are representative of the national population of nine month olds living in Ireland in 2008.

Baby Friendly Hospital Initiative target

Published reports were reviewed and unpublished material was accessed with the assistance of the Baby Friendly Hospital Initiative in Ireland national coordinator. Information on when hospitals received designation was applied to the NPRS dataset to derive the proportion of all births occurring in designated Baby Friendly Hospitals.

Appointment of regional coordinators target

No regional coordinators have been appointed to date.

3.3 Assessment of Target 1: Data collection

Target 1 on data collection was not achieved. In 2005, the Strategic Action Plan positioned the development of information systems on infant feeding within a wider commitment to develop a child information system but this has not yet been delivered. In the absence of a single comprehensive data collection system, the four current sources of data on breastfeeding in Ireland were examined as discussed in section 3.2. A summary of progress with the development of a child health information system is presented including consideration of progress in the domains of parent held child records and the government commitment to develop a unique health identifier as part of the E-Health Strategy (DoH, 2013).

Section 3.2 and Appendix 2 reveal that there is no suitable data available to assess many aspects of the targets set in the Strategic Action Plan. The main data gaps relate to the availability of suitable data on trends over time in:

- Breastfeeding duration at 3 or 4 months and at 6 months by year
- Breastfeeding duration by geographical location (LHO)
- Breastfeeding duration by socioeconomic group (SEG).

More recently, data on breastfeeding at hospital discharge/48 hours in Ireland are now routinely integrated in the context of government reporting on child health and adult health outcomes, notably in the State of the Nation's Children reports (DCYA, 2012), the Health in Ireland Trends report (DoH, 2012) and the Public Health Information System data (DoH, 2013). In addition, GUI provides nationally representative point prevalence estimates on breastfeeding duration but cannot monitor trends over time or on an annual basis.

Development of a Child Health Information System

A Child Health Information System has not been developed in Ireland to date. Under the Notification of Births Act (1907) and associated legislation, a Birth Notification Form (BNF) must be completed within 36 hours for all live births and for stillbirths where the baby weighs at least 500g or has a gestational age of at least 24 weeks. The copy sent to the Registrar of Births does not contain information on the infant or mother's health, GP or hospital details while that sent to the NPRS does not contain the parents' names, addresses or GP details.[5] The copy sent to the Director of Public Health (DPH) forms the link between hospital and community. Changes in birthing practice and perinatal care have affected the operation of this system. For example under the legislation, the BNF is sent to the DPH in the district of birth which may not be the district of residence, nor does the legislation provide for the more than 400 births taking place annually in hospitals in Northern Ireland. Furthermore, discharge from hospital usually occurs much earlier than in the past.

To address deficits in the current system, many hospitals have developed alternative information systems to streamline information transfer from hospital to community services. The administrative burden and potential for error of multiple entry and/or paper based systems is a key concern and driver for a centralised system. Several information and communication technology (ICT) projects are currently underway which have the capacity to incorporate or link-in with a child health information system. These include:

[5] Practice Standards for Midwives 2010 and in conversation with Dr Tessa Greally

- Maternal and Newborn Clinical Management System (MN-CMS)

This system is being developed to standardise the Information Technology (IT) systems across the 19 maternity hospitals and will include a capacity for direct file provision with the child health information system. The BNF which is currently posted will also be directly transmitted via this system.

- Newborn bloodspot screening (NBS)

The last phase of this project, based in Temple Street hospital, is currently being developed whereby PHNs and staff in maternity hospitals will be able to log on to the system to check results. This system will also include capacity for file sharing with the child health information system. Infant feeding is recorded on this system.

In addition, the National Immunisation and Child Health Information System, the Universal Neonatal Hearing Screening, and the National Child Care Information System also have the potential to be incorporated or linked with a child health information system.

A Child Health Information Network has been recently established and aims to facilitate collaboration between clinical, management, ICT and other professionals involved in aspects of development, regulation, use and maintenance of information systems in child health.

The Health Identifier Bill was published in December 2013. This provides the legal basis for health identifiers for health service users and unique identifiers for health service providers. The identifiers will be used across the health service, both public and private. The use of identifiers could support transfer of information from hospital to community services and vice versa on infant feeding, flag up those who may be in need of additional supports and support information sharing between a range of services.

Parent held child health records are another consideration within the development of child health information systems. A pilot project using an integrated electronic child health information system which incorporates both breastfeeding initiation and duration data commenced in the Mid-West in 2001. This system has been introduced in two other areas in the North West and the North East, but it has not been extended nationally.

3.4 Assessment of Target 2: Breastfeeding rates

The Strategic Action Plan set targets for breastfeeding initiation (defined in the Strategic Action Plan as based on the NPRS data for breastfeeding at 48 hours/discharge whichever is earlier) and duration. Despite increases in breastfeeding initiation the target was not reached. It was not possible to assess progress towards the target on breastfeeding duration.

Analyses on breastfeeding rates used the NPRS data and the infant cohort of the nationally representative GUI. For consistency, the terms *artificial feeding; exclusive breastfeeding* and *partial breastfeeding* are used to report data from both sources.[6] Where used, the term *any breastfeeding* includes both exclusive and partial breastfeeding. Separate targets are displayed for exclusive and any breastfeeding as indicated in the Strategic Action Plan. Both datasets include a measure of socioeconomic status and in addition, variables were available in both datasets to explore the patterns of breastfeeding rates among women giving birth in Ireland during the course of the Strategic Action Plan.

The baseline year for assessment of the Strategic Action Plan targets is 2005 for all analyses. Therefore data analysis on the NPRS data relates to the six year period from the beginning of 2005 to the end of 2010 (considered as the term of the Strategic Action Plan). In addition, analyses on data up to the end of 2012 were also completed to update to the most recent breastfeeding data available in Ireland.

Overview of key demographic changes in birth patterns over the period of the Strategic Action Plan

Prior to an assessment of the breastfeeding data, this section presents some key demographic changes in birth patterns over the Strategic Action Plan period. This assessment provides a context for the findings on infant feeding in terms of both the numbers of births and the social and demographic profile of mothers giving birth in Ireland at the time.

[6] The NPRS term combined is interpreted as partial; GUI term never breastfed is interpreted as artificial. With GUI and NIFS there will be many exclusively breastfed babies who received complementary feeding later. This is a common pattern in Ireland.

The total number of births recorded in Ireland during the period 2005-2012 was 569,268. Only a small number (168 of these births) were missing information on breastfeeding in the NPRS dataset which indicated a high level of data completion. These cases were treated as missing in all analyses and findings are presented on the total number of cases with sufficient breastfeeding data (n=569,092).[7] The number of births in Ireland rose by almost 14,000 (from 61,341 in 2005 to 75,084 in 2010) indicating a 22% increase in births over the course of the Strategic Action Plan.

The age composition of the NPRS data 2005 to 2012 shows a trend towards a higher mean age of women giving birth in Ireland - the mean age in 2005 was 31.0 years compared to 31.5 years in 2010, and 32 years in 2012. In 2005, 57% of all births in Ireland were to mothers 30-39 years old compared to 61.2% in 2012. The proportion of women giving birth aged under 19 years has halved between 2005 and 2012 (2.2% to 1.1%). The proportion of women giving birth age 40 or above showed a slight increase from 4.2% to 5.6% between 2005 and 2012.

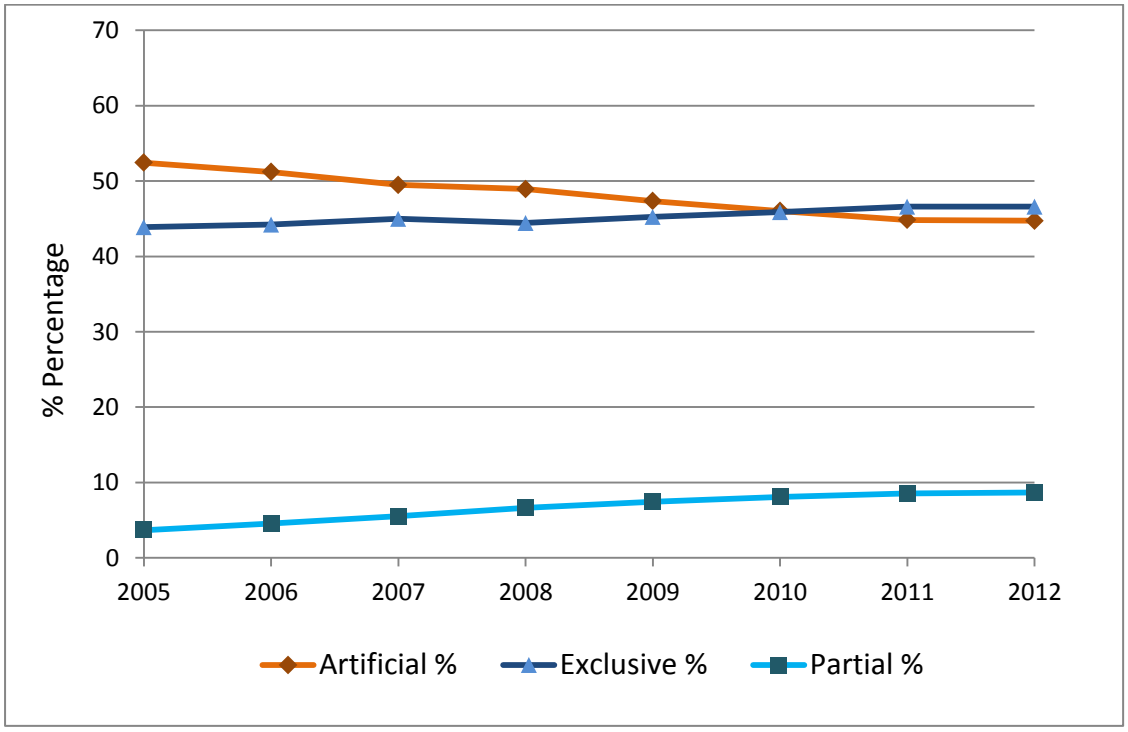
The increasing national and ethnic diversity of mothers giving birth over this period is notable. Non-Irish mothers accounted for 17.1% of all births recorded in the NPRS in 2005 compared to 24.6% in 2010. This increase was mainly accounted for by a substantial increase in the numbers of European mothers giving birth in Ireland during these years. Births to non-Irish European mothers increased from 2,936 in 2005 to 10,315 in 2010 and accounted for 13.7% of all births in 2010. Over this period, the majority of European mothers giving birth in Ireland (79%, n=49,735) were from Eastern Europe, in particular the EU 15-27 accession countries.[8] The proportion of all births reported in the NPRS accounted for by Eastern European mothers rose from 2.5% (n=1,582) in 2005 to 11.3% (n=8,494) in 2010 and 11.5% (n=8,225) in 2012. There was also a slight increase in the proportion of births among Asian mothers in Ireland during this time from 1,753 in 2005 to 2,889 in 2010, accounting for 3.8% of all births in Ireland in 2010. Published studies have shown that changes in the ethnic diversity of mothers giving birth in Ireland has been a significant factor in breastfeeding patterns in Ireland (Brick and Nolan, 2013; Layte et al, 2013). There were no targets or actions set relating to monitoring breastfeeding rates by ethnicity or the needs of particular ethnic groups within the initial Strategic Action Plan.

[7] Missing cases by year: 2005 (13), 2006 (19), 2007 (13), 2008 (122), 2009 (4), 2010 (2), 2011 (3), 2012 (0).
[8] The EU 15-27 countries are Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Bulgaria and Romania.

3.4.1 Trends in Breastfeeding Initiation

This analysis of breastfeeding initiation data during the Strategic Action Plan term (2005-2010) is based on NPRS data on breastfeeding at discharge from hospital/48 hours in line with the terms used in the Strategic Action Plan (see Figure 3.1). Rates of exclusive breastfeeding and partial breastfeeding rose over the period while rates of artificial feeding fell. Some levelling off in these trends is evident in the years following the end of the Strategic Action Plan (2011-2012).

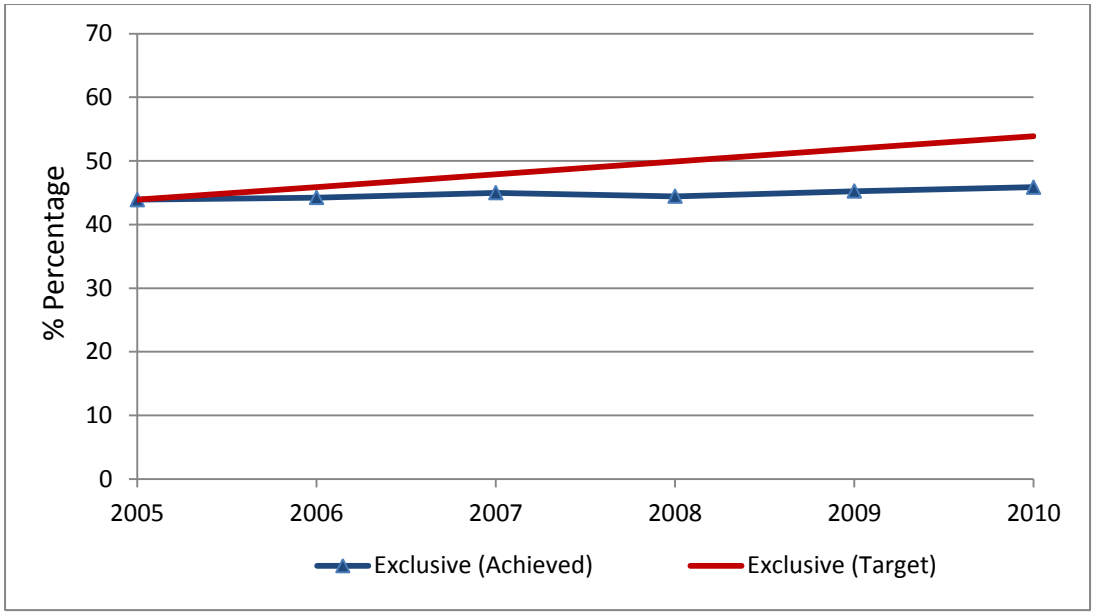
Figure 3.1: Trends in infant feeding on discharge from hospital 2005-2012 (NPRS)



The observed increases in breastfeeding initiation did not meet the specified annual increase of 2 percentage points in the Strategic Action Plan. A comparison of achieved and target rates of exclusive and any breastfeeding are presented in Figures 3.2(a) and (b).

Figure 3.2(a): Achieved and target rates of any breastfeeding on discharge from hospital/at 48 hours 2005-2010 (NPRS)

Figure 3.2(b): Achieved and target rates of exclusive breastfeeding on discharge from hospital/48 hours 2005-2010 (NPRS)



For all babies born in Ireland during the period of the Strategic Action Plan (start 2005 to end 2010), more than half (50.9%) were receiving some breast milk on discharge from hospital. During this time 44.8% were exclusively breastfed while 6% were partially breastfed (Table 3.2).

The baseline breastfeeding initiation rate in 2005 was 47.6% for any breastfeeding, 43.9% for exclusive breastfeeding, and 3.7% for partial breastfeeding. At the end of 2010, breastfeeding rates had increased, to 54.0%, 45.9% and 8.1% respectively. The average annual change was calculated at 1.1%, 0.3% and 0.7% respectively.

In 2007, any breastfeeding became the predominant type of infant feeding on discharge for the first time and this has been maintained up to 2012 (Table 3.2).

Table 3.2: Changes in type of infant feeding 2005-2010/12 (NPRS)

Year	Type of Breastfeeding, n (%)			Total
	Any	Exclusive	Partial	
2005	29,166 (47.6)	26,917 (43.9)	2,249 (3.7)	61,328 (100)
2006	31,872 (48.8)	28,893 (44.2)	2,979 (4.6)	65,331 (100)
2007	36,084 (50.5)	32,133 (45.0)	3,951 (5.5)	71,425 (100)
2008	38,276 (51.1)	33,305 (44.4)	4,971 (6.6)	74,948 (100)
2009	39,757 (52.7)	34,145 (45.2)	5,612 (7.4)	75,492 (100)
2010	40,523 (54.0)	34,443 (45.9)	6,080 (8.1)	75,082 (100)
Total 2005-2010	215,678 (50.9)	189,836 (44.8)	25,842 (6.0)	423,606 (100)
Total crude percentage point change 2005-2010	6.4%	2%	4.4%	n/a
Average annual percentage point change 2005-2010	1.1%	0.3%	0.7%	n/a
2011	40,774 (55.2)	34,440 (46.6)	6,334 (8.6)	73,924 (100)
2012	39,557 (55.3)	33,351 (46.6)	6,206 (8.7)	71,562 (100)
Total crude percentage point change 2005-2012	7.7%	2.7%	5%	n/a
Crude annual percentage point change 2005-2012	1.0%	0.3%	0.6%	n/a

Relative increases in rates of partial breastfeeding were greater than those observed for exclusive breastfeeding. This increase in partial breastfeeding represents a substantial proportion of the increase in overall rates of any breastfeeding in Ireland. However, there is an issue in the interpretation of the term partial breastfeeding, which does not distinguish between high and low ratios of breastfeeding to artificial feeding. Breastfeeding rates on discharge from hospital/48 hours increased marginally 2010-2012 with very little change

2011-2012 (0.1 percentage point increase for partial breastfeeding). In 2012, rates were 55.3% for any breastfeeding, 46.6% for exclusive and 8.7% for partial breastfeeding.

Comparison of national breastfeeding initiation rates from survey data

Over half of mothers of nine month old infants (55.8%) reported in GUI that they had ever breastfed their baby. When examined by type of feeding, the proportion of those exclusively breastfed was 43.7% (n=5,214) and 12.1% (n=1,366) were partially breastfed. Published findings from the Infant Feeding Survey (IFS) reported a breastfeeding initiation rate of 42% for exclusive breastfeeding and 13% for partial breastfeeding in the same year (2008).

The rates estimated in GUI and IFS are more favourable for both any and partial breastfeeding parameters compared to those recorded by the NPRS data for 2008 (Table 3.3). There is broad agreement across all sources regarding rates of exclusive breastfeeding with differences apparent principally in recorded levels of partial breastfeeding. There are a number of possible explanations for differences between NPRS and survey estimates of breastfeeding initiation

- The NPRS data captures data on women who are breastfeeding at the time of discharge or 48 hours after birth and may not be capturing those women who put the infant to the breast/achieved even a single natural feed but were no longer breastfeeding on discharge/at 48 hours, and as such there may be a drop-off occurring during that period
- There may be bias, such as recall bias, for breastfeeding rates estimated in survey data due to retrospective reporting (GUI)
- There may be other forms of bias at play including reporting bias or sampling bias.

Table 3.3: Comparison of 2008 breastfeeding initiation rates from three data sources

Type of breastfeeding	*NPRS*	*GUI*	*IFS*
Any	51.1%	55.8%	55%
Exclusive	44.4%	43.7%	42%
Partial	6.6%	12.1%	13%

Breastfeeding initiation rates by socioeconomic group

The Strategic Action Plan target was for a 4 percentage point annual increase in breastfeeding initiation rates among socioeconomic groups 5 and 6. This target was achieved in respect of any breastfeeding but not in respect of exclusive breastfeeding. Assessment of this target was complicated by the lack of a uniform definition and measure of socioeconomic groups across the datasets used in this Review (see Appendix 3). GUI used well-established measures of social class, while the NPRS records occupation type applying the 1991 Central Statistics Office (CSO) classification. IFS also records occupation, but uses the 2006 CSO classification.

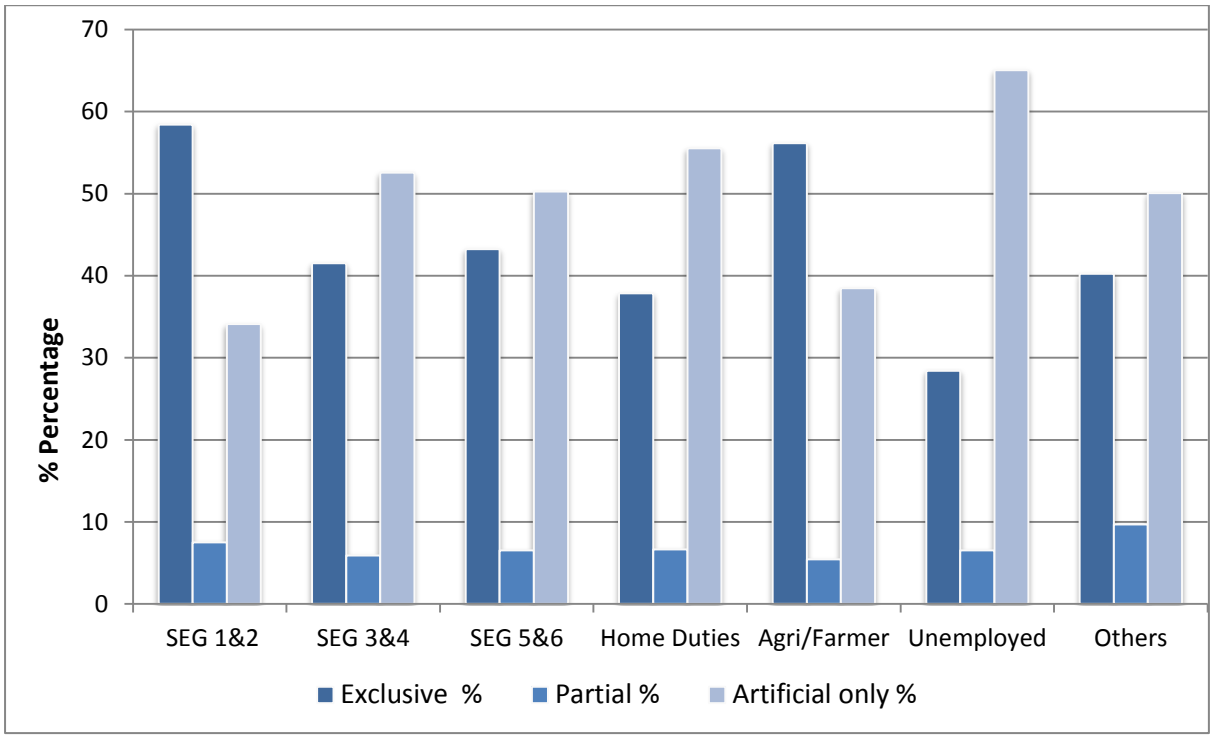
In addition, meaningful interpretation is problematic due to the general limitations that apply to assessing women's socioeconomic status. A large proportion of women in NPRS (21.9%, n=124,538) reported their primary activity as home duties which can represent a diverse group of women across a broad socioeconomic spectrum. Furthermore, 4.3% of cases in the NPRS data did not fit into a socioeconomic category. These included cases where the mother's occupation is not stated, is not classifiable, or where the record was based on father's occupation alone. All of these cases were recoded and presented as a separate 'Other' category in socioeconomic analyses. Figure 3.3 presents data on type of infant feeding according to mother's SEG based on the NPRS data.

Significant differences were recorded for any breastfeeding according to socioeconomic group (SEG) in the NPRS data. Mothers in SEG 1 and 2 recorded significantly higher rates of any breastfeeding compared to those in any other grouping (65.9%). Women from an agricultural, farming or fishing background also recorded higher rates compared to others (61.5%). Unemployed mothers had the lowest rate of any breastfeeding compared to any other grouping (35%) and women in the home duties category also recorded comparatively lower rates of breastfeeding (44.5%).

Patterns observed for any breastfeeding were reflected for exclusive breastfeeding with mothers in SEG 1 and 2 and those from an agricultural, farming or fishing background showing the highest rates (58.4% and 56.1% respectively) and women who were unemployed or performing home duties showing the lowest rates (28.4% and 37.8% respectively). The

highest rate of partial breastfeeding was recorded for those in the Other category (9.7%). Mothers from the highest SEG also recorded high rates of partial breastfeeding while those from agricultural backgrounds recorded the lowest rate (7.5% and 5.4% respectively). Artificial feeding was the most commonly represented type of infant feeding on discharge from hospital/48 hours among women in SEGs 3 to 6, home duties, unemployed and Other categories. Artificial feeding was highest among mothers who were unemployed (65%).

Figure 3.3: Infant feeding on discharge by mother's SEG 2005-2010 (NPRS)



Similar findings were observed when infant feeding was examined by social class in GUI for nine months old infants born in 2008 (see Table 3.4).[9] There was a significant association found between breastfeeding type and social class (SC) in GUI ($\chi 2 = 643.1$, $p<0.05$). However, while a social gradient is evident, any breastfeeding rates were similar between SC 2 and 3. There was no social gradient observed in respect of women who reported partial breastfeeding. The rate of exclusive breastfeeding was substantially lower in the lower social

[9] For analyses of social class in GUI – 52 respondents were classified as 'all others gainfully occupied'– these were dropped for statistical analyses).
As mentioned, mother's SC in GUI is derived from household SC status leading to an over-representation of higher SCs.

class group and is particularly low in those who have never worked, in line with the pattern observed in NPRS data. Of women in SC 1, 66.9% breastfed compared to 48% in SC 2, 49.4% in SC 3 and 32.1% in the never worked category. Exclusive breastfeeding rates were substantially higher for SC 1 compared to any other category and substantially lower for those who never worked compared to other categories (54% and 19.7% respectively).

Table 3.4: Infant feeding by social class among mothers of nine month old infants, n (weighted %) [CI's] (GUI)

Social class	Infant Feeding									Total
	Exclusive n (%) [95 % CI's]			Partial n (%) [95 % CI's]			Artificial only n (%) [95 % CI's]			
(SC 1) Professional/ Managerial	3,075	54.0%	[52.4-55.5]	688	12.9%	[11.9-13.9]	1,593	33.2%	[31.7-34.7]	5,356 (100%)
(SC 2) Other non-manual/ skilled-manual	1,371	37.6%	[35.8-39.5]	372	10.4%	[9.2-11.6]	1,565	52.0%	[50.0-54.0]	3,308 (100%)
(SC 3) Semi-skilled/ unskilled-manual	420	35.5%	[32.1-39.1]	139	13.9%	[11.4-16.7]	437	50.6%	[46.9-54.4]	996 (100%)
All others gainfully occupied	24	36.0%	[21.8-53.1]	12	18.2%	[9.1-32.9]	16	45.9%	[29.6-63.1]	52 (100%)
Never worked	324	19.7%	[17.3-22.4]	155	12.4%	[10.1-15.0]	742	67.9%	[64.6-71.1]	1,221 (100%)
Total	5,214	43.7%	[42.7-44.8]	1,366	12.1%	[11.4-12.8]	4,353	44.2%	[43.1-45.3]	10,933 (100%)

Trends in initiation of breastfeeding over time and SEG: any breastfeeding

Table 3.5 presents trends over time in type of feeding by SEG using NPRS data. Overall any breastfeeding rates increased across all socioeconomic categories during the course of the Strategic Action Plan. The biggest gains in any breastfeeding over the course of the strategy were observed for mothers in the lower socioeconomic groups (i.e. SEG 5 and 6 including semi-skilled and unskilled mothers). This included gains in both exclusive and partial breastfeeding. The crude increase was 28.2% between 2005 and 2010 indicating an average percentage point increase of 4.7% each year. This increase is in excess of the specified annual target of 4% increase in the Strategic Action Plan for SEGs 5 and 6. This change has likely

been driven by an increase in the proportion of non-Irish nationals in the lowest socioeconomic categories in more recent years. In 2005, Irish mothers accounted for 83% of all births in Irish hospitals in SEG 5 and 6 and European mothers accounted for 10%, however by 2012, half (51%) of all births to mothers in SEG 5 and 6 were accounted for by non-Irish European mothers. Substantial gains were also observed among mothers from an agricultural, farming or fishing background, increasing by on average 2.5% annually over the term of the Strategic Action Plan. Again, it is likely that some of this increase is related to a change in the nationality composition of women giving birth from agricultural backgrounds. Non-Irish European women accounted for 20% of all births in this category in 2012 compared to only 8% in 2005. The smallest gains were observed for those in the highest socioeconomic group and those performing home duties (0.4% and 0.6% average annual increases respectively).

Table 3.5: Changes in proportion of any breastfeeding on discharge (NPRS)

Socioeconomic group n (%)		**Any breastfeeding n (%)**			**Percentage point change over time**			
					2005-2010		**2005- 2012**	
		2005	2010	2012	Total % change	Average annual % change	Total % change	Average annual % change
SEG 1&2	169,138 (29.7)	10,387 (64.4)	15,249 (66.6)	15,693 (68.2)	2.2	0.4	3.8	0.5
SEG 3&4	208,722 (36.7)	9,760 (43.2)	13,467 (49.8)	13,110 (50.5)	6.6	1.1	7.3	0.9
SEG 5&6	19,232 (3.4)	682 (30.2)	1,479 (58.4)	1,341 (60.7)	28.2	4.7	30.5	3.8
Home Duties	124,577 (21.9)	6,298 (42.1)	7,132 (45.9)	6,408 (46.8)	3.8	0.6	4.7	0.6
Agri/farmers/fishers	1,296 (0.2)	76 (53.9)	87 (69.1)	113 (61.1)	15.2	2.5	7.2	0.9
Unemployed	21,677 (3.8)	772 (30.4)	1,239 (37.7)	1,150 (35.5)	7.3	1.2	5.1	0.6
Others	24,626 (4.3)	1,191 (44.1)	1,870 (51.2)	1,742 (54)	7.1	1.2	9.9	1.2
Total	569,268 (100)	29,166 (47.6)	40,532 (54.0)	39,557 (55.3)	6.4	1.1	7.7	1.0

Trends in initiation of breastfeeding over time and SEG: exclusive breastfeeding

Table 3.6 presents data on exclusive breastfeeding over time by SEG from the NPRS data based on breastfeeding patterns on discharge from hospital/48 hours. The proportion of mothers in SEG 5 and 6 who were recorded as exclusively breastfeeding rose from 27.5% in 2005 to 50% in 2010 and this rate continued to increase up to 53.4% in 2012. There was a 22.5 percentage point increase in exclusive breastfeeding over the term of the strategy in this SEG which can be reflected as a 3.8 percentage point average annual increase, just short of the target of 4%. Smaller gains were observed for those from agriculture, farming or fishing backgrounds, those in SEG 3 and 4 and for unemployed mothers (1.7%, 0.4% and 0.9% crude annual percentage point increase) over the term of the Strategic Action Plan. A decrease was observed in the exclusive breastfeeding rates among mothers from higher SEGs (1 and 2) during this time (0.5% average annual decrease for the period 2005 to 2010).

Table 3.6: Crude changes in proportion of exclusive breastfeeding on discharge 2005-2012 (NPRS)

Socioeconomic group n (%)		**Exclusive breastfeeding n (%)**			**Percentage point change over time**			
					2005-2010		**2005- 2012**	
		2005	2010	2012	Total % change	Average annual % change	Total % change	Average annual % change
SEG 1&2	169,138 (29.7)	9,753 (60.5)	13,148 (57.4)	13,457 (58.5)	-3.1	- 0.5	-2.0	- 0.3
SEG 3&4	208,722 (36.7)	9,072 (40.2)	11,517 (42.6)	11,152 (42.9)	2.4	0.4	2.7	0.3
SEG5&6	19,232 (3.4)	619 (27.5)	1,267 (50.0)	1,179 (53.4)	22.5	3.8	25.9	3.2
Home duties	124,577 (21.9)	5,707 (38.1)	5,938 (38.2)	5,220 (38.1)	0.1	0	0	0
Agri/Fishers	1,296 (0.2)	74 (52.5)	79 (62.7)	104 (56.2)	10.2	1.7	3.7	0.5
Unemployed	21,677 (3.8)	652 (25.7)	1,013 (30.8)	924 (28.5)	5.1	0.9	2.8	0.4
Others	24,626 (4.3)	1,040 (38.5)	1,481 (40.5)	1,315 (40.7)	2.0	0.3	2.2	0.3
Total	569,268 (100)	26,917 (43.9)	34,443 (45.9)	33,351 (46.6)	2.0	0.3	2.7	0.3

Trends in initiation of breastfeeding over time and SEG: partial breastfeeding

Table 3.7 presents data on partial breastfeeding on discharge from hospital/48 hours by SEG of mother for the periods 2005–2010 and 2005-2012. The highest increase in rates for partial breastfeeding was observed for mothers in SEGs 5 and 6 from 2.8% in 2005 to 8.4% in 2010. This reflects a crude annual percentage point increase of 0.9% over the course of the Strategic Action Plan. The percentage of those partially breastfeeding in the agricultural background category increased substantially over the period reviewed but this is based on very low numbers of mothers in this group.

Table 3.7: Crude increases in proportion of partial breastfeeding on discharge by socioeconomic status 2005-2012 (NPRS)

Socioeconomic group n (%)		Partial breastfeeding n (%)			Percentage point change over time			
					2005-2010		2005-2012	
		2005	2010	2012	Total % change	Average annual % change	Total % change	Average annual % change
SEG 1&2	169,138 (29.7)	634 (3.9)	2,101 (9.2)	2,236 (9.7)	5.3	0.9	5.8	0.7
SEG 3&4	208,722 (36.7)	688 (3.1)	1,950 (7.2)	1,958 (7.4)	4.1	0.7	4.3	0.5
SEG 5&6	19,232 (3.4)	63 (2.8)	212 (8.4)	162 (7.3)	5.6	0.9	4.5	0.6
Home Duties	124,577 (21.9)	591 (4.0)	1,194 (7.8)	1,188 (8.7)	3.8	0.6	4.7	0.6
Agri/farmers/ fishers	1,296 (0.2)	2 (1.4)	8 (6.4)	9 (4.9)	5	0.8	3.5	0.4
Unemployed	21,677 (3.8)	120 (4.7)	226 (6.9)	226 (7.0)	2.2	0.4	3.3	0.4
Others	24,626 (4.3)	151 (5.6)	389 (10.7)	427 (13.2)	5.1	0.9	7.6	1.0
Total	569,268 (100)	2,249 (3.7)	6,080 (8.1)	6,206 (8.7)	4.7	0.8	5	0.6

Breastfeeding initiation by maternity unit

The Strategic Action Plan target for breastfeeding initiation stipulated that as well as applying nationally, the target should also apply at maternity hospital/unit level. The data use

agreement signed between IPH and the NPRS did not allow for publication of data according to maternity unit.

What has been the role of nationality/ethnicity in the observed breastfeeding rates?

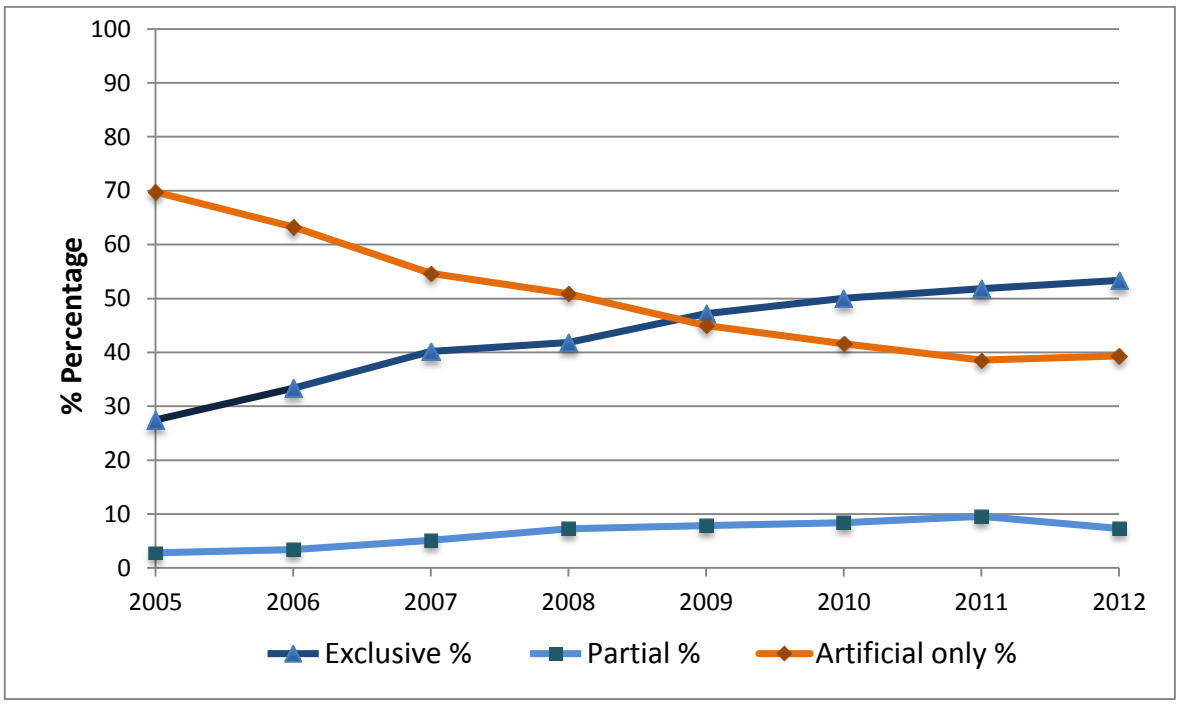
The Strategic Action Plan did not make any specific reference to monitoring breastfeeding targets by mothers' nationality or ethnicity. An immigrant effect in the increase in breastfeeding rates in the data recorded in Ireland between 2005 and 2010/2012 has been previously reported (Brick and Nolan, 2013). This is pertinent to an appropriate assessment of both the overall targets for breastfeeding and the targets relating to SEGs. On average, over the term of the Strategic Action Plan, Irish mothers had substantially lower rates of any breastfeeding (43.8%) compared to any other nationality recorded in the NPRS data.

Table 3.8: Type of breastfeeding by mother's nationality, n (%) 2005-2010 (NPRS)

Nationality	Proportion of all nationalities	Type of breastfeeding n (%)		
		Any breastfeeding	Exclusive	Partial
Ireland	443,189 (77.8)	194,127 (43.8)	173,141 (39.1)	20,986 (4.7)
UK	15,700 (2.8)	9,228 (58.8)	8,234 (52.5)	994 (6.3)
EU15 (excluding Ireland & UK)	7,997 (1.4)	6,954 (87)	6,298 (78.8)	656 (8.2)
EU accession countries	49,735 (8.7)	42,775 (86)	38,026 (76.5)	4,749 (9.6)
The rest of Europe	4,960 (0.9)	4287 (86.4)	3,854 (77.7)	433 (8.7)
Africa	19,020 (3.3)	15,626 (82.2)	10,070 (53.0)	5,556 (29.2)
Asia	20.8 (3.7)	16,916 (81.4)	12,631 (60.8)	4,285 (20.6)
America	4,941 (0.9)	4,210 (85.2)	3,667 (74.2)	543 (11.0)
Australia	947 (0.2)	797 (84.1)	748 (79.0)	49 (5.2)
New Zealand and other	346 (0.1)	296 (85.6)	268 (77.5)	28 (8.1)
Multi-nationality	6 (0)	6 (100)	2 (35.3)	4 (66.7)
Other nationality	45 (0.01)	23 (51.1)	22 (48.9)	1 (2.2)
Not stated	1,450 (0.3)	764 (52.8)	666 (46.0)	98 (6.77)
Total	569,228 (100)	269,009 (52.0)	257,627 (45.3)	38,382 (6.7)

The substantial increase in the proportion of exclusive breastfeeding in SEGs 5 and 6 (Figure 3.4a) may be explained in part by the increase in the proportion of non-Irish mothers in this category between 2005 and 2010. The proportion of European mothers in SEG 5 and 6 rose from 8% in 2005 to 47.1% in 2010, accounting for most of the change in nationality in SEG 5 and 6 during these years.[10]

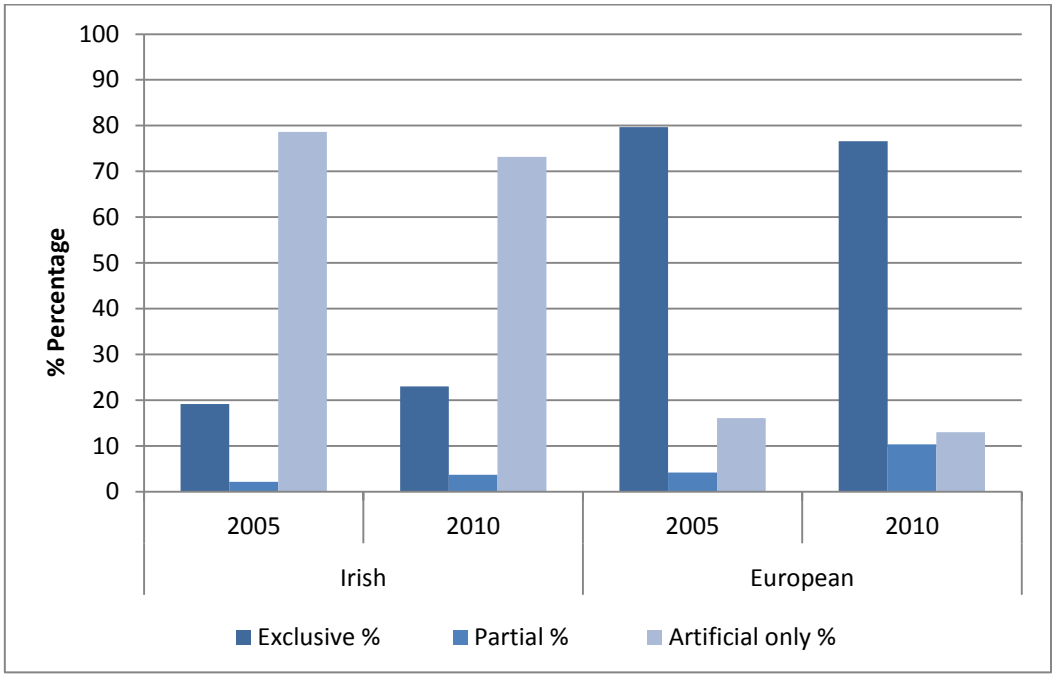
Figure 3.4(a): Trends in infant feeding rates on discharge in SEG 5 and 6, 2005-2012 (NPRS)



The rate of exclusive breastfeeding among Irish mothers in SEGs 5 and 6 was particularly low compared to that recorded for European mothers in 2005 (19.2% and 79.7% respectively) (Figure 3.4(b)). Rates of partial breastfeeding in this group were also higher for European mothers.

[10] Unskilled manual category is not driving this change. Numbers are very low in this category (n=15 in 2005, n=6 in 2010) and the proportion of Irish women in this category increased over the course of the Strategic Action Plan from 33% to 66%. The proportion of non-Irish mothers rose from 16% in 2005 to 54.2% in 2010 in SEG 5 i.e. semi-skilled category.

Figure 3.4(b): Rates and type of infant feeding for Irish and European mothers in SEG 5 and 6, 2005 and 2010 (NPRS)



An analysis of breastfeeding by mother's ethnicity was undertaken with GUI data. A small number of GUI respondents did not report their ethnicity (n=35). Of those who did, the large majority identified themselves as Irish (84.1%) and 1.1% were categorised as Other Whites including European, American and Australasian. Due to the categorisation of the ethnicity variable it was not possible to compare breastfeeding rates between Ireland and Eastern European countries as per the NPRS analyses.

In keeping with the NPRS data Irish mothers reported lower rates of both any breastfeeding and exclusive breastfeeding compared to all other nationalities. The rate of exclusive breastfeeding for 'Irish' mothers in GUI matched that reported in the NPRS data (39.3% and 39.1% respectively). However, the rates of partial breastfeeding among Irish mothers differed between data sources (10.3% in GUI compared to 4.7% in NPRS).

Table 3.9: Type of infant feeding by ethnicity, n (weighted %) [CI's]) (GUI)

Ethnicity	*Infant Feeding*									*Total (%)*
	Exclusive n (%) [95% CIs]			Partial n (%) [95% CIs]			Artificial only n (%) [95% CIs]			
Irish	3,687	39.3%	[38.1-40.5]	902	10.3%	[9.6-11.0]	4,126	50.4%	[49.2-51.6]	8715 (100)
Other White	1,099	71.1%	[68.1-74.0]	214	15.5%	[13.3-18.0]	166	13.3%	[11.2-15.8]	1479 (100)
African /Other Black	185	51.2%	[44.5-57.9]	150	41.2%	[34.7-48.0]	25	7.6%	[4.5-12.5]	360 (100)
Chinese /Other Asian	182	61.7%	[55.0-68.0]	83	29.4%	[23.7-35.9]	27	8.9%	[5.7-13.5]	292 (100)
Other including Mixed Race	38	75.4%	[56.0-88.1]	8	14%	[5.4-31.6]	6	10.6%	[3.0-31.4]	52 (100)
Total	5,191	43.7%	[42.6-44.8]	1,357	12.1%	[11.4-12.8]	4,350	44.2%	[43.1-45.4]	10898 (100)

Breastfeeding initiation rates by age of mother

There were significant differences between the rates of breastfeeding by mothers' age group in the NPRS data. Rates of exclusive and partial breastfeeding increased with age and those in the oldest age group (40 years and over) were most likely to be breastfeeding their baby on discharge from hospital/48 hours. Rates of breastfeeding were particularly low among mothers who were under 19 years of age for exclusive and partial breastfeeding (19.6% and 3.8% respectively). The proportion of those who breastfed in this age group decreased from 20.7% to 17.6% over the five years of the Strategic Action Plan, however rates had almost returned to 2005 levels by 2012 (20.3%).

The age composition of the NPRS data remained relatively constant over the period of the Strategic Action Plan, although there was a slight trend towards a higher mean age of mothers giving birth in Ireland between 2010 and 2012.

GUI data also show that type of breastfeeding was patterned by age of the mother. The mean age of mothers in the sample was 31.7 years. There was little difference between the mean age of mothers who exclusively breastfed their babies (32.4 years) compared to those who partially breastfed (31.8 years) or never breastfed (30.9 years). However when the type of

feeding was examined across age groups, similar to findings from the NPRS, women in older age groups were far more likely to exclusively breastfeed their children compared to those in younger age groups (χ^2 = 534.9 p<0.000).

Patterns in breastfeeding among preterm infants

The Strategic Action Plan refers indirectly to preterm/vulnerable infants, but there was no specific target set for a breastfeeding rate for preterm infants (or any other defined subset of special need infant e.g. low birth weight infants). In the IFS, infants of all gestational ages weighing less than 3kg at birth were less likely to receive breast milk for their first feed after birth than infants weighing above 3kg (Begley et al, 2008). A comprehensive analysis of trends in breastfeeding according to whether infants are preterm or full term was outside the terms of reference of the Review. However, a snapshot of data from 2012 is provided in order to describe the current situation and to inform future actions.

Circa 5.6% of babies born in Ireland are born preterm. This section presents data on breastfeeding on discharge from hospital/48 hours among preterm infants based on NPRS data and breastfeeding patterns of preterm infants based on the report of mothers in GUI.

Table 3.10: Type of feeding by gestational age of infant 2005-2012 (NPRS)

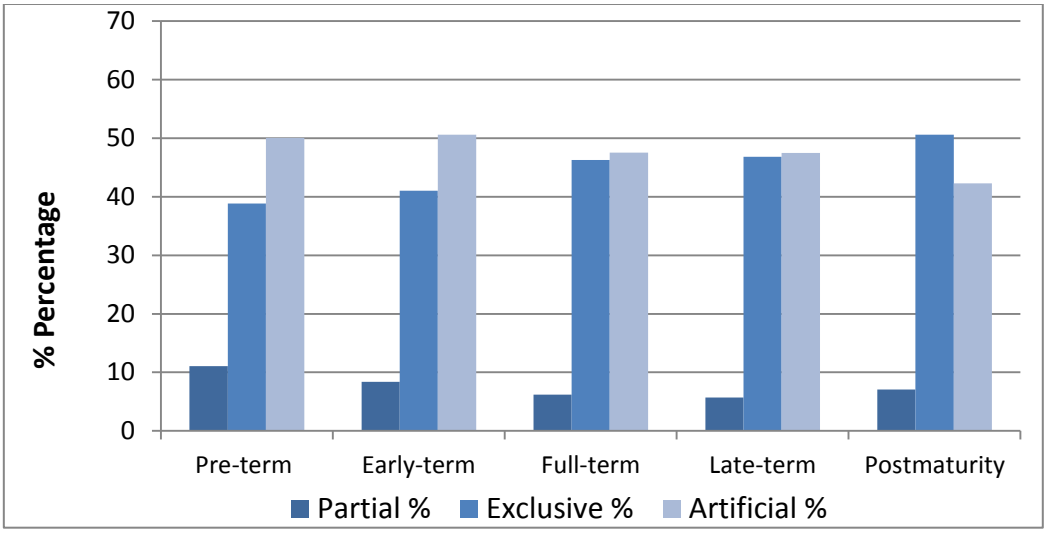
Gestational age	*Proportion of total births n (%)*	*Type of infant feeding n (%)*			*Total*
		Exclusive	Partial	Artificial only	
Preterm <37 weeks	31,996 (5.6)	12,423 (38.9)	3,539 (11.1)	15,995 (50.1)	31,957 (100)
Early-term 37-38 weeks	94,005 (16.5)	38,572 (41)	7,853 (8.4)	47,550 (50.6)	93,975 (100)
Full-term 39-40 weeks	300,109 (52.7)	138,866 (46.3)	18,570 (6.2)	142,580 (47.5)	300,016 (100)
Late-term 41 weeks	123,541 (21.7)	57,845 (46.8)	7,029 (5.7)	58,655 (47.5)	123,529 (100)
Postmaturity >42 weeks	195,57 (3.44)	9,900 (50.6)	1,385 (7.1)	8,270 (42.3)	19,555 (100)
Total	569,208 (100)	257,606 (45.3)	38,376 (6.7)	273,050 (48)	569,032 (100)

Table 3.10 presents data on type of infant feeding according to the gestational age of the infant.[11] Gestational age was found to be a significant factor associated with both exclusive and partial breastfeeding. Rates of any breastfeeding and exclusive breastfeeding were lower among mothers of preterm or early-term babies taken across the period 2005 to 2012.

This analysis suggests that just over half of Ireland's preterm babies received any breast milk on discharge/48 hours whichever is earlier (53.5% in 2010 and 54.4% in 2012). As many preterm babies are not discharged before 48 hours it is presumed that data relates mainly to the first 48 hours. It is not clear how receipt of medications, expressed breast milk or donor breast milk is recorded within the NPRS. It is acknowledged that preterm infants may be receiving intravenous or enteral medications/fluids and it is not clear how such situations are recorded.

Substantial gains were made in any breastfeeding of preterm infants over the Strategic Action Plan period and this was largely driven by increases in partial breastfeeding; 5.7% of preterm babies were partially breastfed in 2005, compared to 12.7% in 2010.

Figure 3.5: Type of infant feeding by gestational age 2005-2012 (NPRS)



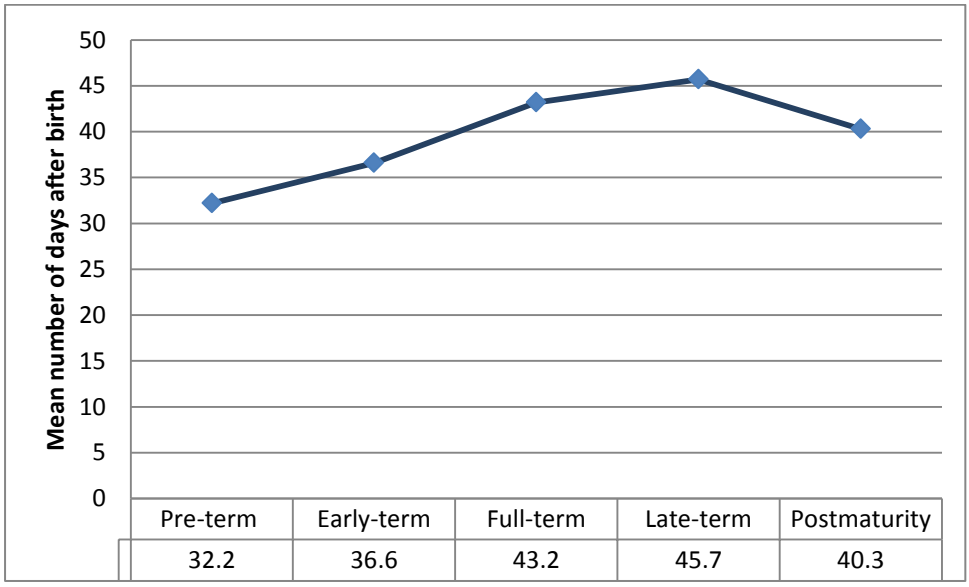
[11] Infants born at less than 37 full weeks of gestation were considered preterm. Infants born between 37 and 38 weeks were considered early term, those born at 39 to 40 weeks were considered full term. Infants born at 41 weeks were categorised as late term and those born at greater than 42 weeks were categorised as postmaturity.

Analysis of GUI mirrors the pattern observed within NPRS. There were significant differences between whether a mother breastfed their baby or not and exclusive or partial breastfeeding depending on the gestational age of the baby ($\chi 2 = 107.2$, $p<0.05$). A smaller proportion of mothers who had preterm babies breastfed compared to those who had full term babies and a lower proportion of those who did, breastfed exclusively. Babies born pre and early term were significantly more likely to be artificially fed at an earlier age compared to other babies ($\chi 2 = 64.5$, $p<0.05$).

Table 3.11: Type of feeding by gestational age of infant (GUI)

Gestational age	*Proportion of total births*		*Type of Infant Feeding*									*Total %*
	n	*%*	Exclusive			Partial			Artificial only			
			n	%	[95% CIs]	n	%	[95% CIs]	n	%	[95% CIs]	
Preterm	718	6.6	238	31.9	[28.1-35.9]	162	22	[18.6-25.9]	318	46.1	[41.8-50.4]	100
Early-term	1,757	16.0	779	41.2	[38.6-43.9]	234	13.3	[11.5-15.2]	744	45.5	[42.8-48.3]	100
Full-term	5,168	47.2	2,534	44.4	[42.8-45.9]	588	11	[10.1-12.0]	2,046	44.6	[43.0-46.2]	100
Late-term	2,035	18.5	1,034	46	[43.5-48.6]	224	10.8	[9.4-12.5]	776	43.2	[40.6,-45.8]	100
Postmaturity	1,224	11.6	611	47.4	[44.1-50.8]	147	11.3	[9.4-13.5]	466	41.3	[38.0-44.7]	100
Total	10,901	100	5,196	43.7	[42.6-44.8]	1,355	12.1	[11.4-12.8]	4,350	44.2	[43.1-45.3]	100

Figure 3.6: Comparison of mean age of infant at first formula feed by gestational age (GUI)



3.4.2 Trends in Breastfeeding Duration

There was no data fit for purpose to monitor the target on breastfeeding duration as set out in the Strategic Action Plan. Analysis of GUI provides a snapshot picture of breastfeeding duration in Ireland for infants born in 2008. The data suggests that breastfeeding duration in Ireland falls considerably short of WHO recommendations.

Analysis of breastfeeding duration is complex as mothers may be moving between exclusive and partial breastfeeding over time. In addition, this is recalled data and there is some suggestion that mothers interpret the term exclusive breastfeeding differently to established definitions.

In total, 55.8% of biological mothers responding in the infant cohort of GUI reported that they had ever breastfed their baby (n=6,580). Of the mothers who ever breastfed, 92.4% continued to breastfeed after the first two days of birth, indicating that around 7% of mothers who started breastfeeding had stopped by the time they leave hospital or shortly after. This finding suggests that this phenomenon may be significant in the differences observed in breastfeeding initiation rates between different data sources (see Table 3.3).

Figure 3.7 shows the proportion of women who initiated breastfeeding who were still breastfeeding as the number of days following birth increased, for both total breastfeeding (combining exclusive and non-exclusive) and exclusive breastfeeding. Of women who initiated breastfeeding, the breastfeeding proportion fell to 70% at 30 days and to 50% by around three months. By six months (180 days) the proportion of women still providing any breastfeeding fell to 26% of those who initiated breastfeeding (Layte and McCrory, 2014).

Figure 3.7: Proportion of mothers' breastfeeding by type and days since birth of child[12]

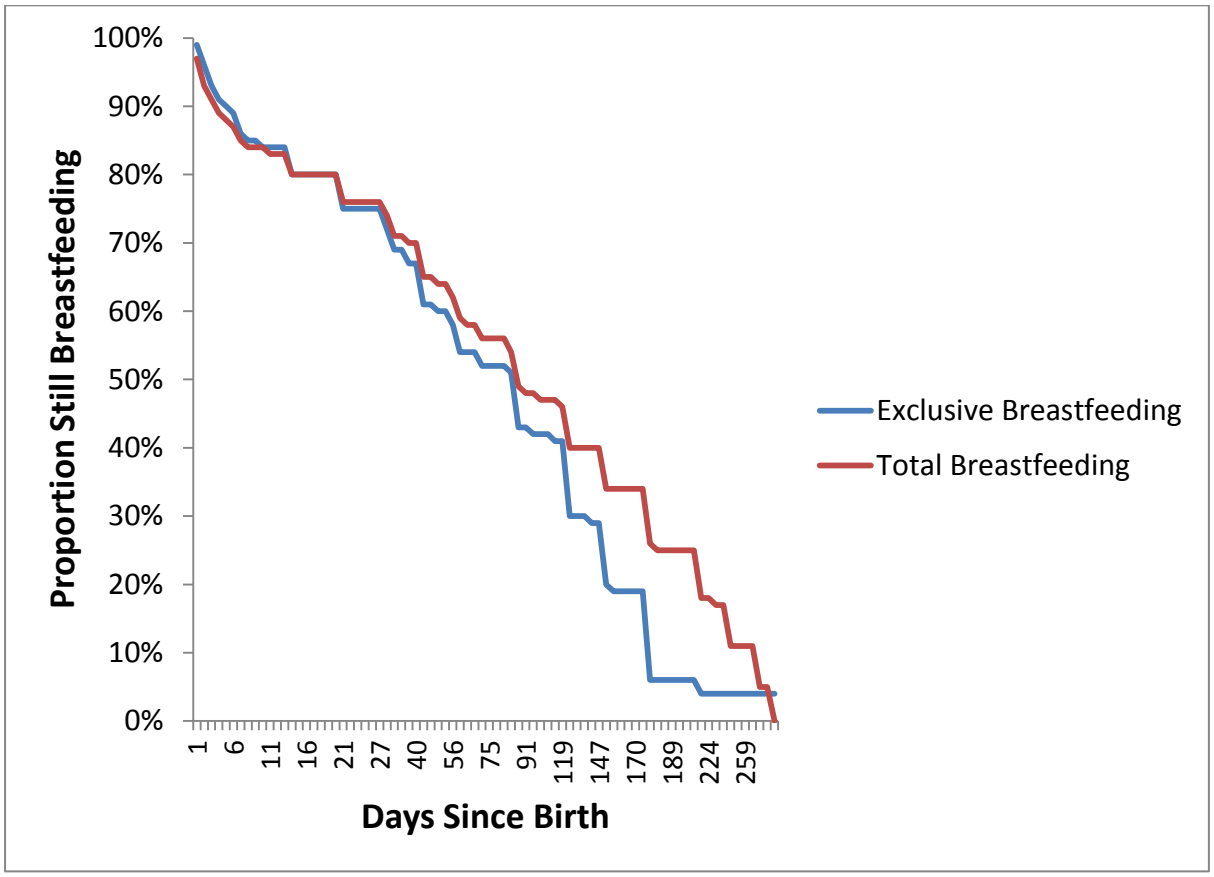


Table 3.12 illustrates the duration of breastfeeding by type of feeding for exclusive and partial breastfeeding. Breastfeeding duration appeared to be influenced by type of breastfeeding. Only a small proportion of those who exclusively breastfed their baby had stopped after two days (5.1%) while a much greater proportion of those who had partially breastfed their baby had stopped after two days (20.5%). Exclusive breastfeeding was associated with a longer duration of breastfeeding. Of those who reported partial breastfeeding 80.4% had stopped by three months and 91.5% had stopped at six months. Of those who reported exclusive breastfeeding, 59.6% had stopped at three months and 95% had stopped at six months. Mothers who exclusively breastfed, did so for an average of 8 weeks and 3 days. As would be expected, a higher proportion of mothers continued to partially feed after six months compared to exclusive feeding (8.5% and 2.2 % respectively).

[12] Courtesy of Richard Layte; Layte and McCrory (2014).

Table 3.12: Duration of breastfeeding by type of feeding, n (%), [95% CI]) (GUI)

Duration of breastfeeding	Type of infant feeding (total =10,933)							
	Exclusive n, % of exclusive, [95% CIs]			% of total	Partial n, % of partial, [95% CIs]			% of total
≤ 2 Days	231	5.1%	[4.4-5.8]	2.2 %	267	20.5%	[18.1-23.2]	2.5%
> 2 & ≤ 90 days	2,745	54.5%	[52.9-56.0]	23.8 %	781	59.9%	[56.8-62.9]	7.3%
> 90 & ≤ 180 days	1,946	35.4%	33.9-36.9	15.5 %	170	11.1%	[9.3-13.2]	1.3%
>180 & ≤ 270 days	106	1.9%	[1.5-2.3]	0.8 %	57	3.3%	[2.4-4.6]	0.4%
> 9 months	186	3.2%	[2.7-3.8]	1.4%	91	5.2%	[4.0-6.6]	0.6%
Total	5,214	100%		43.7%	1,366	100%		12.1%

Only a small number (n=401, 3.2%) of all babies had not had infant formula at the time of survey (nine months). Thirty-five mothers were unsure if their baby had had a formula in that time. Over half of nine month olds who had been given infant formula received it within two days of birth (n=5,274, 54.9%); almost 30% had formula between three days and three months, and 12.2% had formula between three months and six months. This indicates a high level of early supplementation with infant formula in Ireland. Also, formula (possibly including follow-on milks) use was reportedly used by 97% of mothers of nine month old children. This indicates that the use of breast milk substitute type products is standard within the earliest years of a child's life in Ireland, including among children who were breastfed at some point.

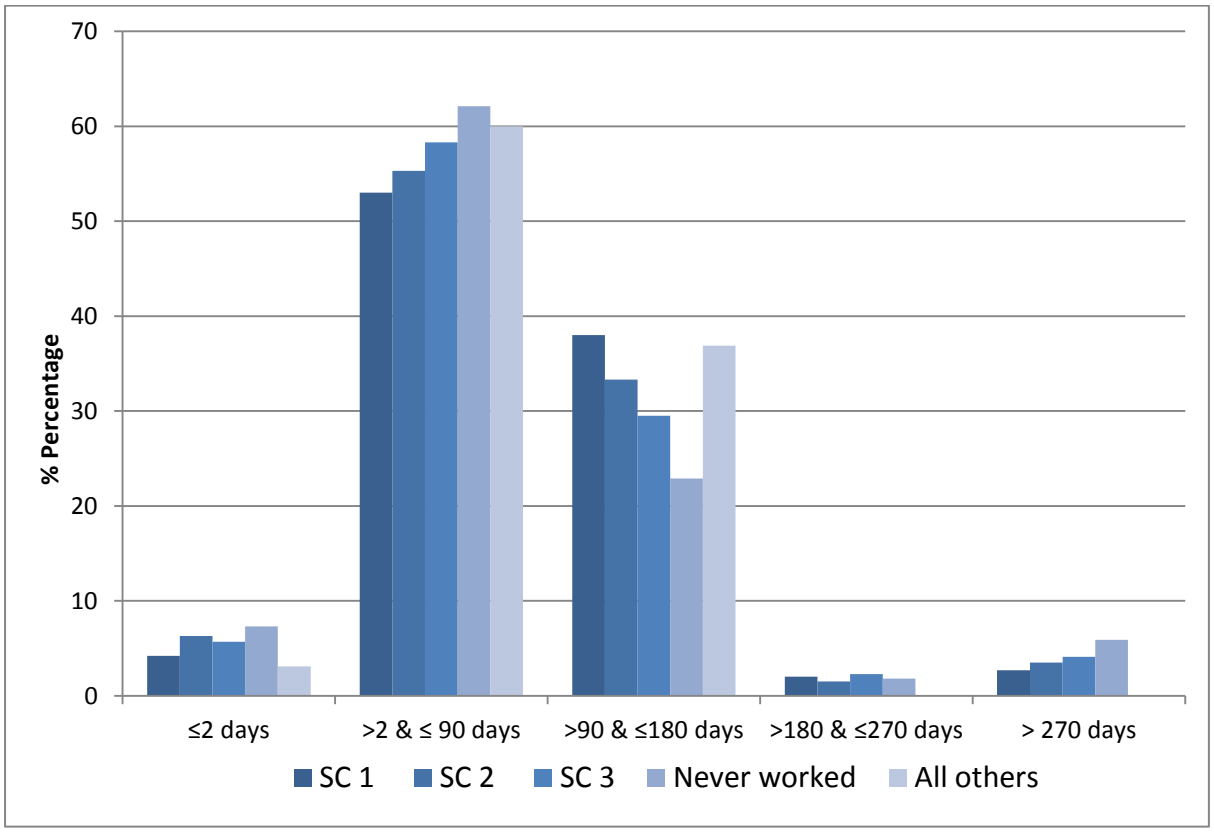
Breastfeeding duration and SEG

Due to the low number of cases in some categories (particularly for all others gainfully occupied) it is difficult to formally investigate significant differences between breastfeeding duration by social class categories in GUI.

Of mothers who breastfed exclusively, 69.4% of those who never worked had stopped exclusively breastfeeding by three months compared to 57.2% of mothers in SC 1, 61.6% in

SC 2 and 64% in SC 3. There is a slight inverse gradient in SC for mothers who stop exclusive breastfeeding at six months. The proportion of mothers who stopped exclusive breastfeeding before six months is slightly lower in lower social class categories (SC 3=93.5%, SC 2=94.9%) compared to SC 1 (95.2%). Those who never worked had the highest rate of exclusive breastfeeding after six months compared to any other SC category (7.7%) and a similar patterns was also observed in IFS (Begley et al, 2008). Rates of prolonged exclusive breastfeeding (i.e. six months and over) appear to be lower in mothers who are categorised in SC 1-3 and is notably lower among professional and managerial mothers.

Figure 3.8: Exclusive breastfeeding duration by social class (GUI)



Of mothers who partially breastfed their babies in GUI, 80.4% had stopped by three months. While there is no clear gradient in duration of partial breastfeeding by SC, it appears that SC 3 (14.5%) and those who never worked have higher rates of prolonged partial breastfeeding compared to either SC 1 (7.8%) or SC 2 (4.9%).

3.5 Assessment of Target 3: Coverage of the Baby Friendly Hospital Initiative in Ireland

This section presents findings based on the targets for the Baby Friendly Hospital Initiative (BFHI) in Ireland. This analysis of the targets is based on

- Annual Reports of the BFHI in Ireland as provided by Ireland's national BFHI coordinator and shared for the purposes of this Review
- Interviews with the BFHI national coordinator and chair of the BFHI committee conducted in the context of later sections of the Review (Chapters 4 and 5)
- Analysis of NPRS data to assess the number of births occurring in designated Baby Friendly Hospitals (BFH) over the Strategic Action Plan term.

Target for 100% participation by maternity hospitals in the Baby Friendly Initiative

There are three levels of participation in BFHI: membership, certificate of commitment and designated baby friendly. The target for 100% participation by maternity hospitals in Ireland in the Baby Friendly Hospital Initiative by 2010 was not achieved. Of the 20 maternity hospitals in operation in 2010, two were not participating in the BFHI. However, 100% participation was achieved between 2005 and 2007.

Target for 50% of all hospital births to occur in designated Baby Friendly maternity hospitals

The target that half of all hospital births occur in designated Baby Friendly maternity hospitals in Ireland by 2010 was not achieved. NPRS data were analysed to assess the numbers and proportion of babies born in designated BFH in Ireland between 2005 and 2010 and also for the most recently available data in 2011 and 2012. Babies were deemed to have been born in a BFH if at the time of their birth the hospital fitted one of these categories:

- The hospital was externally assessed as fully meeting the Baby Friendly criteria
- The hospital was in the process of re-designation/already re-designated.

Where a designated hospital successfully achieves re-designation they are assumed to be of designated status for the period of assessment while they await award. Where a hospital achieved designation at some point during that year, calculations were based on the month of

designation, taking all births occurring from the start of the month of designation (e.g. if a hospital was designated Baby Friendly in April all births from 01 April to 31 December of that year were taken as births in that Baby Friendly hospital). Home births (n=1,364) are excluded from analyses and totals for each year are based on the total number of babies born in a hospital. Details on the Baby Friendly status of hospitals were provided by the national BFHI coordinator.

Table 3.13: Number and proportion of babies born in BFH by year, 2005-2012 (NPRS)

Year of birth	*Babies born in BFH n (%)*	*Babies not born in BFH n (%)*	*Total number of babies born n (%)*
2005	8,504 (13.9)	52,654 (86.1)	61,158 (100)
2006	15,367 (23.6)	49, 813 (13.4)	65,180 (100)
2007	22,395 (31.4)	48,858 (68.6)	71,253 (100)
2008	28,334 (37.8)	46,578 (62.2)	74,912 (100)
2009	28,534 (37.9)	46,814 (62.1)	75,348 (100)
2010	25,648 (34.2)	49,260 (65.8)	74,908 (100)
2011	25,758 (34.9)	48,001 (65.1)	73,759 (100)
2012	28,226 (39.5)	43,160 (60.5)	71,386 (100)
Total 2005-2010	128,782 (30.5)	293,977 (69.5)	422,759 (100)
Total 2005-2012	182,766 (32.2)	385,138 (67.8)	567,904 (100)

This analysis found that around one in seven hospital born babies born in Ireland was born in a designated Baby Friendly hospital in 2005. In 2010, around one in three hospital born babies was born in a designated Baby Friendly hospital, representing significant progress over the period, albeit short of the stipulated target.

Overview of the operation of the BFHI over the term of the Strategic Action Plan

The BFHI is a global evidence-based approach to develop the capacity of hospital-based maternity services to promote, support and protect breastfeeding. BFHI in Ireland began in 1998.

The operation of BFHI in Ireland is supported by a national coordinator and a national BFHI committee. Until 2011, BFHI was part of the National Health Promoting Hospitals Network

and not directly linked to the HSE. A grant from the HSE funds a part-time contract for the role of national coordinator. The coordinator of BFHI drafts Irish adaptations of international BFHI materials, compiles reports, highlights BFHI related resources, facilitates networking between hospitals, increases awareness of BFHI in Ireland, trains assessors and coordinates the assessments. The BFHI national committee is a multi-disciplinary group which facilitates implementation of BFHI process including identifying hospitals that are ready for assessment, facilitating assessment and designation status and ensuring good governance of the initiative. A BFHI in Ireland website and newsletter is operated by the national coordinator and an annual report is provided to the BFHI committee. BFHI in Ireland restructured its national committee in 2012 with a view to developing a longer term governance structure and a committee with wider representation (Baby Friendly Hospital Initiative Annual Report, 2012).[13]

The annual reports highlight the following barriers to implementation of the initiative at hospital level:

- Low awareness among hospital management
- Lack of funding for protected staff time in hospitals
- Staff turnover
- Overburdened staff

BFHI in Ireland expanded its work to initiate and develop a Baby Friendly Supportive Paediatric Unit Project and a Breastfeeding Supportive Workplace Project during the term of the Strategic Action Plan, but these projects are currently inactive. Documentary information on the operation of BFHI in Ireland, the status of Irish maternity hospitals and the experience of engaging hospitals with adopting the Ten Steps is available on www.babyfriendly.ie. A partial evaluation of BFHI was undertaken by the Health Promoting Hospitals Network but there has been no comprehensive external evaluation of the operation of BFHI in Ireland to date.

[13] Kindly provided by the National Baby Friendly Hospital Initiative Coordinator. Annual reports are available on the website www.babyfriendly.ie

3.6 Assessment of Target 4: Appointment of regional coordinators

No regional coordinators have been appointed to date. The Strategic Action Plan proposed that the implementation of actions would occur in the context of enhanced regional and local structures. A National Breastfeeding Coordinator has been in place since 2001. Regional structures supporting the implementation of breastfeeding policy have occurred but not in a standardised way (One2One, 2009). Interviews with stakeholders detailed in Chapters 4 and 5 reveal aspects of the development of regional leadership occurring within both maternity hospitals and community structures.

3.7 Key points

Data collection target

- The Strategic Action Plan proposed that infant feeding data would be enhanced within the context of the development of a comprehensive child health information system. However, the development of such a child health information system never occurred.[14]

- While the government's National Set of Child Wellbeing Indicators includes rates of breastfeeding initiation, HSE Child Health Key Performance Indicators do not.

- Current health information systems do not allow for an appropriate annual assessment of breastfeeding duration at population level as set out in government policy.

Breastfeeding initiation at discharge from hospital/48 hours after birth

- There was a 22% increase in births between 2005 and 2010.

- Over the term of the Strategic Action Plan (start 2005 to end 2010), the rate of breastfeeding on discharge from hospital/48 hours changed as follows:

  Any breastfeeding increased from 47.6% in 2005 to 54% in 2010

  Exclusive breastfeeding increased from 43.9% in 2005 to 45.9% in 2010

- Over the term of the Strategic Action Plan, the rate of any breastfeeding on discharge from hospital/48 hours increased by on average 1.1 percentage points per year falling short of the target of a 2 percentage points annual increase.

- Over the term of the Strategic Action Plan, the rate of exclusive breastfeeding on discharge from hospital/48 hours increased by on average 0.3 percentage points per year falling short of the target of a 2 percentage points annual increase.

[14] The national extension of the parent held records system which includes breastfeeding data halted because of the agreed need to develop an integrated national childhood immunisation information system. A business case has been developed and signed off in April 2014.

- Increases in rates of any breastfeeding have been largely driven by increases in partial rather than exclusive breastfeeding. Rates of partial breastfeeding increased from 3.7% in 2005 to 8.1% in 2010. The nature of partial breastfeeding is poorly understood.

- In 2007 a milestone was reached when any breastfeeding became the predominant type of infant feeding on discharge from hospital/48 hours in Ireland for the first time. In 2011, a further milestone was achieved when rates of exclusive breastfeeding exceeded those of artificial feeding for the first time.

- There were no specific targets set in terms of subgroups of vulnerable infants. Rates of any breastfeeding appeared to improve for preterm infants over the term of the Strategic Action Plan, although the reliability of infant feeding data may be an issue for complex cases. Increases were driven by substantial increases in partial rather than exclusive breastfeeding.

- Any and exclusive breastfeeding rates on discharge from hospital/48 hours were strongly patterned by mothers' socioeconomic status, nationality/ethnicity and maternal age. Socioeconomic classification of women within NPRS has limitations in terms of understanding the social situation of mothers and monitoring health inequalities. Lower levels of any/exclusive breastfeeding initiation were observed among mothers of Irish nationality, unemployed mothers, and younger mothers.

- There were significant changes in the ethnic diversity of mothers giving birth in Ireland since 2005 that directly affected breastfeeding patterns at national level. Progress in rates of breastfeeding initiation at national level and within targets set for socioeconomic groups 5 and 6 have been significantly driven by an immigrant effect.

Breastfeeding duration

- As suitable data on annual trends in breastfeeding duration rates was not available, survey data was used to provide a snapshot assessment of breastfeeding duration in

Ireland. There was some evidence of a social gradient in breastfeeding duration for exclusive breastfeeding.

- Breastfeeding duration in Ireland falls short of WHO recommendations. Of mothers who initiated breastfeeding 50% were still breastfeeding by around 3 months.

- Partial breastfeeding was associated with shorter overall breastfeeding duration and a drop-off in breastfeeding occurring within the early days and weeks. The term partial breastfeeding may reflect a wide variety of infant feeding behaviours.

- Around 97% of mothers of nine month old infants reported that their infant had received an infant formula/follow on milk product indicating that the use of breast milk substitutes products is the norm in Ireland, even among mothers who breastfed their infant.

Baby Friendly Hospital Initiative

- The target for 100% participation by Irish maternity hospitals in the Baby Friendly Hospitals Initiative by 2010 was not achieved. Of the 20 maternity hospitals in operation in 2010, two were not participating in the BFHI. However, 100% participation was achieved between 2005 and 2007. The term participation refers to involvement at certificate of commitment, membership or designated levels.

- The target for 50% of births occurring in designated Baby Friendly hospitals by 2010 was not achieved. In 2005 around one in seven babies born in Ireland were born in a designated Baby Friendly Hospital. By 2010, around one in three babies were born in a designated Baby Friendly Hospital.

Appointment of Regional Coordinators

- There was no evidence of progress with the appointment of ten regional coordinators over the term of the Strategic Action Plan.

Chapter 4. Review of the National Breastfeeding Strategy Implementation Committee (NBSIC)

4.1 Introduction

This phase of the Review evaluated the National Breastfeeding Strategy Implementation Committee (NBSIC) in relation to the working of the committee and progress on the implementation of the Strategic Action Plan from 2005 to 2012. Specifically the following were examined:

- the process informing the development and membership of NBSIC
- the working of NBSIC
- the effectiveness of NBSIC in advancing the goals and expected outcomes of the Strategic Action Plan.

This phase of the project was informed by qualitative analysis of two data sources: a retrospective documentary review of key documents relating to the committee's governance and activities, and semi-structured interviews with a subset of committee members. An initial scoping review was conducted on the documents of the NBSIC to inform the interview schedule for the committee participants and findings of the documentary review were then triangulated with findings from the interviews.

4.2 Methods

A documentary review examined the historical background of the development of NBSIC; including the nature and scope of the committee, and stakeholder involvement in advance of the inaugural meeting of NBSIC. Committee documents including Terms of Reference and records of all meetings were reviewed to identify agreements and action points arising. Supplementary documents provided by the National Breastfeeding Coordinator for the purpose of the Review were also examined including; hand-written meeting notes, notes of actions arising from meetings, and Strategic Action Plan updates. Documented reporting mechanisms and governance was also examined.

Semi-structured interviews were completed with the Chair and three other members of NBSIC. Selection of interview participants was based on ensuring a broad representation of committee perspectives. An interview schedule focused on the following considerations:

- Membership and engagement of NBSIC
- Leadership of NBSIC
- Roles and responsibilities of NBSIC members
- Adherence to Terms of Reference
- Resourcing and support of NBSIC and the Strategic Action Plan
- Implementation successes and goals achieved
- Challenges encountered
- Perceived barriers to implementation
- Opportunities for future work

Interviews with lead agencies and key organisations in implementing the Strategic Action Plan were undertaken for Chapter 5. Where these interviews included commentary directly related to NBSIC, these comments were integrated into this chapter. Additional content relevant to the functioning of the committee raised in other sections of the Review was also considered.

Thematic Framework

Interviews were recorded and transcribed. Key themes were generated from interviews and organised into a framework as represented in Table 4.1. A framework analysis approach revealed four key themes: governance and resourcing, membership engagement and operation of NBSIC, policy and practice support, and implementation barriers and future directions. Several sub-themes also emerged under each of the main themes.

Table 4.1: Themes emerging from interviews

Governance and resourcing	Membership engagement and operation of NBSIC	Policy and practice support	Implementation barriers and future directions
Terms of Reference	Roles and responsibilities	Department of Health	Infrastructure
Role of the Committee	Voluntary bodies	Reporting structures	Awareness and education
Resourcing and implementation infrastructure	Clinical gap	Clinical practice	Budget
Leadership and positioning in HSE	General Practice	General Practice	Opportunity for further work

4.3 Governance and Resourcing

In 2005, responsibility was assigned from DoH to the HSE to oversee the implementation of the recommendations of the Strategic Action Plan. It was agreed that a multi-disciplinary, multi-sectoral committee would be established by the HSE to oversee implementation.

An initial scoping exercise in May 2006 identified suitable membership of NBSIC which was then tasked with overseeing the implementation and monitoring of the five year Strategic Action Plan. Representatives from a wide range of stakeholder groups were appointed to NBSIC in advance of the first meeting. Several members of the initial planning group for the Strategic Action Plan were appointed to the NBSIC, including HSE representatives from Population Health, the National Hospitals Office, Primary, Continuing and Community Care (PCCC) and the National Breastfeeding Coordinator. The assistant National Director of Population Health-Health Promotion in the HSE was appointed as Chair of NBSIC at inception (November 2006) and was replaced in 2010 by the Interim Assistant National Director of Health Promotion with responsibility for Programmes in the HSE. Members included voluntary breastfeeding organisations as well as members from General Practice, Public Health, Paediatrics, Gynaecology and Obstetrics, Dietetics and Nursing and Midwifery. Given the lead role of the then DoHC in developing the Strategic Action Plan, and their key role in advancing the agenda at a governmental level, it was considered important that a representative be appointed to NBSIC. The Director General from the Office of Children in the DoHC was appointed as an intergovernmental representative. Several other

stakeholder agencies were also considered for inclusion on NBSIC however membership was not pursued.[15]

The Terms of Reference of NBSIC as agreed by members at the inaugural meeting were:

1. Reviewing the current situation in relation to breastfeeding promotion, protection and support at national and regional level.
2. Providing strategic direction to the HSE area breastfeeding committees in implementing the national Strategic Action Plan.
3. Setting an order of priority, on a phased basis, for the individual Actions and Targets within the timeframe of the overall Strategic Action Plan.
4. Engaging with key stakeholders in all the agencies identified in the Strategic Action Plan to get commitment and spearhead efforts towards the achievement of the Strategic Action Plan.
5. Monitoring and evaluating progress towards the achievement of all the Actions and Targets in the Strategic Action Plan.
6. Providing regular feedback to the Chief Executive Officer of the HSE on progress being made toward the full implementation of the Strategic Action Plan.

The Terms of Reference for NBSIC were generally considered appropriate, however there was also an aspiration to revisit and refresh them in light of this Review. Some interviewees felt that the working of NBSIC was closely aligned to the Terms of Reference with continual monitoring of targets on an annual basis, however, other interviews yielded a different perspective. Some of the members who had been recruited to NBSIC after it had been formed to replace original members reported that while they had received a copy of the Terms of Reference they were not all that familiar with them. In addition they felt that the working of NBSIC was more oriented around agenda items and matters arising from members than driven by the Terms of Reference.

[15] Food Safety Authority of Ireland, Food Safety Promotion Board (now Safefood), Irish Business and Employers' Confederation, media.

Any evaluation of the effectiveness of NBSIC over the duration of the Strategic Action Plan must acknowledge its delayed establishment. The inaugural meeting of the NBSIC took place in April 2007, 17 months after the launch of the five year Strategic Action Plan. Three regional scoping meetings were held in advance of the inaugural meeting, between June 2006 and January 2007. Initial meetings focused on the resourcing of NBSIC as well as integration of the work of the committee at local and regional level within the HSE and across other sectors. The establishment of four HSE Health Area breastfeeding strategy implementation groups was considered essential in developing regional implementation. Attempts to include this on the Regional Health Forum agenda in the HSE were unsuccessful at that time. In addition, the possibility of establishing sub-groups to support the work of the national committee was considered. Important areas for sub-group working were identified as; training and practice development, surveillance and monitoring, communications and advocacy.

It was agreed at the inaugural meeting that the official term of office for NBSIC would end five years from the publication of the Strategic Action Plan (i.e. October 2010). Thus, NBSIC was officially in operation between April 2007 and October 2010 covering three and a half years of the term of the Strategic Action Plan and still continues to meet. The following sections focus on the working of NBSIC during that term (2007-2010) and from 2010 to the end of 2012.

NBSIC members were concerned from the outset regarding the impact of under-developed and ill-defined regional and local structures to support the implementation of the Strategic Action Plan. This specifically relates to the second Term of Reference: *providing strategic direction to the HSE area breastfeeding committees in implementing the National Strategic Action Plan*.

In 2005, the HSE was established as the national health service, with four HSE administrative areas (HSE Dublin Mid-Leinster, HSE Dublin North-East, HSE South and HSE West), which were in turn divided into 32 LHOs, replacing ten independently governed regional Health Boards. In the period between publication of the Strategic Action Plan and NBSIC convening, a report on structures to support and promote breastfeeding within the former health board regions was commissioned and completed (One2One, 2006). The report was intended to assess opportunities for the development of breastfeeding support and promotion

infrastructure in the HSE within renewed configuration of the health services. This report highlighted several gaps in breastfeeding promotion and support service provision across the HSE. Issues were mainly related to fragmented service provision and an under developed regional policy landscape. In addition, it identified a lack of dedicated funding to support breastfeeding promotion and support services across Health Board regions. Several recommendations were highlighted with regard to the role of NBSIC in monitoring and driving national activities.

Provision was made for four Chairs from each of the regional breastfeeding implementation groups (representing each HSE region) to sit on NBSIC. While there was a slight delay in appointing HSE-Dublin North East and HSE-West Chairs, all four were appointed by July 2007. It was envisaged that once established, HSE area committees would advocate for the initiatives needed to implement the Strategic Action Plan with local management in National Hospitals Office and PCCC in the HSE. Provision was made to develop the relationship between existing local breastfeeding committees, the proposed area committees, and NBSIC.

In October 2007 it was agreed that area committees would be established following consultation workshops in each of the HSE areas. However, meetings were delayed substantially and in June 2008 it was acknowledged that '*cost containment measures including travel restrictions on HSE personnel may cause difficulties with the formation and working of the HSE Area Breastfeeding Committees'.* The need to draft local action plans to advance implementation of the goals of the national Strategic Action Plan was also highlighted. NBSIC discussed the need for functions of the area committees to be reviewed to incorporate key actions into service level business plans in line with the Strategic Action Plan rather than through the Regional Committees. The non-appointment of the ten regional breastfeeding coordinators as originally outlined in the Strategic Action Plan, coupled with the under-development of Regional Committees was considered a significant barrier to implementation of the Strategic Action Plan.

Three subgroups were formed early on and work from the sub-groups was monitored regularly at NBSIC meetings. It was envisaged that a subgroup would be formed on policy development, but this sub-group was not advanced. The sub-groups formed were: society issues, data collection, and education and training. Terms of Reference for each sub-group were agreed but this was a lengthy process, mainly related to delays in recruiting members of

NBSIC onto some sub-groups. Interviewees felt the sub-groups were an effective way of progressing the work of NBSIC and this is supported by progress reports in the minutes of meetings. It was noted that a lack of resources and opportunities for engagement negatively impacted on the working of sub-groups, however meetings frequently used teleconference facilities and members communicated primarily by email. While it was acknowledged that the development of the Strategic Action Plan was an extremely important step forward for breastfeeding in Ireland, it was generally felt it could not be advanced as envisaged due to a lack of structural and funding support. NBSIC agreed that some funding would be allocated to support the establishment of the Regional Committees and that the Committee would prioritise funding proposals that would advance the Strategic Action Plan's goals. The role and achievements of both National Breastfeeding Coordinators, who have been in place over the term of the Strategic Action Plan and since, were highlighted in interviews. However, it was emphasised that the post was the only dedicated resource available to NBSIC and that it was not possible to effectively implement the Strategic Action Plan without additional dedicated personnel.

The development of regional and local infrastructure and provision of resources necessary to implement the Strategic Action Plan were affected by budget restraints which emerged in Ireland in the years after NBSIC was established, and by the transformation programme which took place in the HSE. The delayed reconfiguration of structures within the HSE led to an unstable service environment for implementation. As a result, regional structures were never fully developed and existing local structures were not formally integrated with the national structure. Dedicated resources required to reconfigure breastfeeding promotion and support structures in the HSE were not made available and in addition, the budget allocated to the implementation of the Strategic Action Plan was limited.

Some progress reports were missing from the committee documentation. It is notable that there was no interim report produced at the end of the Strategic Action Plan term to document the progress of NBSIC, however it was understood by some committee members that a formal review of the Strategic Action Plan should have taken place at that time.

Findings

- A broad multi-disciplinary and multi-sectoral committee to oversee implementation and monitoring of the Strategic Action Plan was initially sought by the HSE
- Regional meetings were organised to foster regional engagement and clarify regional leadership and responsibility
- A HSE commissioned report on structures to support and promote breastfeeding within the former health board regions was used to inform implementation
- The establishment of NBSIC occurred at a time of considerable change coinciding with the establishment of the HSE and the reconfiguration of the health services
- The establishment of NBSIC was delayed, with the inaugural meeting of the group occurring 17 months after the publication of the Strategic Action Plan
- The Terms of Reference of the group were comprehensive and clearly defined
- Committee members had differing understandings of their roles and responsibilities as members of NBSIC

4.4 Membership engagement and operation of NBSIC

This section relates to the fourth Term of Reference - *engaging with key stakeholders in all the agencies identified in the Strategic Action Plan to get commitment and spearhead efforts towards the achievement of the Strategic Action Plan.* The role of members and their engagement with the process is also examined as well as engagement of key stakeholders in the broader policy and practice environment.

Potential members identified by the HSE scoping group were invited to attend the inaugural meeting in April 2007. In total, 46 individuals were identified from notes and minutes as having attended meetings or nominated to attend meetings between April 2007 and June 2013.[16] Three members tendered their resignation from NBSIC towards the end of the Strategic Action Plan term (between March and June 2010).

[16]This includes the Committee secretary.

It was reported that initial difficulties in recruitment of members and a lack of continuity among some representatives during their term of office impacted on the operational capacity and effectiveness of NBSIC. A core group of six members attended most of the 13 meetings held over the term of the Strategic Action Plan. In the main attendance at meetings was poor with the remaining members attending less than half of meetings. No quorum was defined for NBSIC meetings. Those who attended meetings regularly were Chairs from Population Health and Health Promotion, National Breastfeeding Coordinator, Baby Friendly Hospitals Initiative Coordinator and the Director of Public Health Nursing. Chairs of four Regional Breastfeeding Committees were also appointed as members of NBSIC. Many members who had been originally nominated to the committee changed posts in HSE restructuring. This impacted on the efficient functioning of NBSIC as members were either not replaced or not supported to attend meetings. The non-governmental organisation (NGO) sector was identified as a major contributor to the working of the committee during the term of the Strategic Action Plan. In more recent years membership has expanded to include representatives from Friends of Breastfeeding and the Association of Lactation Consultants in Ireland (ALCI). A representative from Dietetics in the HSE and an academic representative from Nursing and Midwifery also attended meetings regularly. Several gaps in membership and attendance were notable. Attendance by clinicians (paediatricians, obstetricians and GPs) was limited as was attendance by DoH. Gaps in attendance highlight issues with cross-sectoral working on breastfeeding and a lack of dedicated engagement with the implementation of the Strategic Action Plan from sectors and organisations outside the HSE. Lack of cross-sectoral support, in particular engagement from clinical leads at primary care and hospital level was identified by those who were interviewed as a key issue.

Following the discussion of how NBSIC members viewed the role of the committee, interviewees were also asked how they viewed their own role. While some viewed themselves in an active implementation role, others appeared to take a more passive approach. Some viewed their roles as advancing the agenda within their own services but did not see a role working between other services.

> *'They see them as an implementation role within their own service, or their own, you know or within their own agency or whatever. So I'm there as X. I will do whatever I can to promote breastfeeding within my own service and that's my responsibility, but…I don't think maybe they are specific enough actions coming from the*

implementation plan. We don't have an implementation plan necessarily. We have pieces of work as opposed to an implementation plan.'

NBSIC was felt to be well-organised and responsive to matters arising from members. Participation in meetings by those who attended was good and agenda items were considered to be relevant. Members considered that the structures to support integrated working of the committee were under-developed and this was leading to continued silos of breastfeeding work both within and outside NBSIC.

'I think most people contribute, because I think the agenda is usually quite varied and it covers all of the different sectors that people are working in, so there is, I don't think there is anybody that is sitting there, that thinks this isn't relevant for me. I think they do contribute.'

Again when it came to the role of members, there was a sense that a lot of the responsibility for implementation was left to the Breastfeeding Coordinator.

The voluntary organisations were considered in a more advantageous position to act on implementing some of the recommendations. This was mainly due to their ability to engage directly at a local level. In addition, they were also sometimes in a position to hold events such as conferences when the HSE were not in a position to do so.

'In so far as possible when we're made aware of any plans for the HSE for action or events coming, or anything that we can do to support the work of the HSE around breastfeeding, we are absolutely 100% behind them. And sometimes we would be asked to facilitate events or meetings that it might be difficult for the HSE themselves to be the lead.'

Some organisations identified as having a role in the implementation of the Strategic Action Plan did not take up membership including the Health Information and Quality Authority and the Combat Poverty Agency.

Findings

- The membership of NBSIC differed from the membership proposed in early scoping meetings.
- Committee members had differing understandings of their roles, responsibilities and opportunities in terms of how they could implement change and influence decision-making in their own areas of work and within the HSE in the context of the Strategic Action Plan.
- Committee members did not receive any distinct stipend or reimbursement in relation to fulfilling their roles as members of the NBSIC.
- Financial resources to support committee members in progressing implementation of the Strategic Action Plan did not flow from the NBSIC and was sought through their sectoral, regional, local or service budgeting systems or through Section 39 grants.
- There was a lack of engagement by certain key representatives and a lack of continuity among others which impacted on the operational capacity and effectiveness of NBSIC.
- The functioning of the committee was consistently supported by a core membership from the HSE health promotion section, public health nursing/nursing and midwifery, community and voluntary sector and the Baby Friendly Hospitals Initiative.
- NBSIC members considered that the committee had been successful in facilitating networking, coordination and communication matters between stakeholders in the roll-out of new policies but to a lesser extent in terms of changed practices.
- Committee members reported that fostering engagement on breastfeeding issues across the HSE and within clinical leadership programmes was challenging.

4.5 Policy and practice support

This section focuses on the practices adopted by the NBSIC to implement the Strategic Action Plan. It relates to several of the Terms of Reference of the Committee:

- *setting an order of priority, on a phased basis, for the individual actions and targets within the timeframe of the overall Action Plan.*

- *monitoring and evaluating progress towards the achievement of all the Actions and Targets in the Strategic Action Plan.*
- *providing regular feedback to the Chief Executive Officer of the HSE on progress being made toward the full implementation of the Strategic Action Plan.*

Committee members commented on the status afforded to the role of the Breastfeeding Coordinator in the HSE. They felt that this role had greater recognition when it was within DoH and this allowed for a more effective mandate to influence change in breastfeeding policies and practices.

There was general satisfaction expressed with NBSIC leadership. Moreover, all of those interviewed shared an opinion on the need for appropriate positioning of NBSIC within the current HSE structures in order to function effectively and efficiently. Notwithstanding the general satisfaction with the leadership, several of those interviewed were concerned that because the leadership was located in Health Promotion, this may be a barrier for progressing the work of the committee.

> *'it's around health promotion being seen as extra to clinical services or separate to clinical services. If something is seen as health promotion, it's nearly seen as an optional extra.'*

The limited dedicated budget was seen as a major barrier to the effectiveness of NBSIC in general and a reflection of the lower priority afforded to breastfeeding in Ireland.

> *'I think that just as with other health campaigns there has to be a much bigger strategy, a much bigger budget, a much bigger policy if we think this is important.'*

Members agreed that there were a sufficient number of meetings on a yearly basis to advance the working of NBSIC. While substantial work had been completed outside of the committee by the Breastfeeding Coordinator, members felt there was a distinct lack of structures within the HSE to support the Breastfeeding Coordinator's role.

> *'I think what is probably missing and we will probably come on to it is the support for the committee. So that's probably you know often with a meeting, a committee that*

only meets four times a year, there are other pieces of work that happen behind the scenes and I think my feeling is that [National Breastfeeding Coordinator] *carries an awful lot of that outside of the committee, so you know I think the committee probably doesn't need to meet more often, but I think there probably needs to be other supports for* [National Breastfeeding Coordinator]*, that's what I would feel.'*

There was also a noted gap in broader policy and practice support for the Strategic Action Plan in general.

'You see breastfeeding is one of those areas where everybody is saying, 'Yes, yes I support it, I support it' but the true I suppose patrons of it really are either kind of people working in the system who are extremely committed to it or the voluntary sector but you won't have sort of senior management jumping up and down because breastfeeding rates are not as high as they want to be. Do you know? So, it is not one, it is seen as a nice area and yes one that everybody would support but they are not prepared to.'

This lack of support was felt to be evident through the poor visibility of breastfeeding in the HSE. In particular, one interviewee commented on the low profile of breastfeeding within the Health Promotion Unit in the DoH compared to other health promotion topics and areas.

There was also a noted lack of engagement from some representatives on the committee. Where this issue was brought up in interviews, it was generally in relation to the medical/surgical representatives who may find for example, getting locum cover difficult. Many committee representatives (HSE and non-HSE) attended without remuneration.

'I think in the times that I have attended meetings just around the room, there is a notable absence of medical clinicians there'.

'I would like more of my own clinical colleagues to be present…'

The lack of engagement with clinicians was considered a substantial barrier to implementing the Strategic Action Plan in the acute and primary care sectors.

There was thought to be a general lack of engagement among the primary care and general practice leadership in Ireland in relation to breastfeeding. While there is a GP representative on the committee they are representing an academic institute and it was suggested that a more formal process of engagement with the Irish College of General Practitioners (ICGP) would benefit the working of the committee and could lead to increased awareness of the Strategic Action Plan among GPs in general. It was also felt that the ICGP could assist with developing online workshops for GPs to increase awareness and the skills required to improve breastfeeding targets in Ireland.

Findings

- NBSIC members viewed the Strategic Action Plan as an important step forward in the development of action-oriented and evidence-based breastfeeding policies in Ireland.
- The role of the National Breastfeeding Coordinator was seen as pivotal to progressing the work of the committee and the implementation of the Strategic Action Plan.
- Committee members expressed concern that placement of the leadership for breastfeeding in the Health Promotion section of the HSE may have limited the mandate to effect change in the context of maternity and primary care services.
- Committee members considered that greater engagement and leadership within government departments would be beneficial to the roll-out of enhanced practice in the promotion and support of breastfeeding.
- Committee members viewed that poor high level engagement with the Strategic Action Plan reflected that breastfeeding was a low priority at government level.

4.6 Implementation barriers and future directions

Several opportunities for future work of NBSIC were identified in interviews. These included increased engagement with international experts, development of a peer leaders' programme, improved coordination of the working of voluntary organisations and an increased focus on multimedia campaigns.

> *'There is a whole opportunity there on peer leaders. I've just done some training with the community mothers. There is a whole opportunity there around breastfeeding that we are probably not engaging with yet'.*

One member highlighted the important role of undergraduate training for medical students to advance the awareness and recognition of the importance of breastfeeding among clinicians.

> *'I don't see breastfeeding addressed within the medical school curriculum except for a passing glance through the obs and gynae rotation. So, we are missing out on the doctors-to-be.'*

The need to support and engage in ongoing training of professionals through continuous professional development was also highlighted.

Interview participants commented that a more concerted effort at a departmental level would benefit the implementation of the Strategic Action Plan.

> *'I think what needs to change from Breastfeeding I think, from the policy end of it, is, it is that collective drive as to the change in policy, so not just, it's not just the responsibility of the National Breastfeeding Coordinator to change policy, there needs to be more of a policy, you know if it is a national committee, I'd feel it needs to have more of a policy function and not just down to the one individual.'*

One interviewee identified the need for a champion of breastfeeding within DoH who would ensure that breastfeeding was afforded priority at a policy level.

Findings

- Committee members identified the need for future policies to be underpinned by strong high level government commitment and for breastfeeding to be embedded as a priority across a range of health services
- Members considered that the work of the committee could be enhanced by input from international experts
- Further committee work should entail a greater commitment to development of training and professional development for health service providers at national level
- The importance of fostering meaningful and well-supported leadership at national, regional and service levels was emphasised including investment in the role of peer leaders at community level

4.7 Overview of key achievements of NBSIC

This section presents key areas considered and actions taken in relation to the five goals of the Strategic Action Plan over the period 2005 to 2012.

Goal 1. All families have the knowledge, skills and support to make and carry out informed infant feeding decisions, particularly those least likely to breastfeed

Several actions were prioritised throughout the term of NBSIC to advance this goal. This was mainly facilitated through the societal issues and the education and training sub-groups. The committee provided input into:

- The establishment and updating of a national breastfeeding website. Information on addressing potential challenges and signposting to support services available were included www.breastfeeding.ie.
- Coordination and collaboration on the development of joint information resources from the statutory and voluntary service providers.
- The development of standardised policy on provision of appropriate information provision in the antenatal and postnatal periods through the HSE Infant Feeding Policy for Maternity and Neonatal Units (2012) and the piloted Breastfeeding Policy for Primary Care Teams and Community Healthcare settings (2013).
- The development and dissemination of the Families Supporting Breastfeeding resources.
- Liaison with media stakeholders to advance work on breastfeeding promotion and the development of a three year national promotion campaign including National Breastfeeding Week.

Goal 2. The health sector takes responsibility for developing and implementing evidence-based breastfeeding policies and best practice

Several of the objectives identified under this goal were also advanced by the committee. Significant time during meetings was afforded to appropriate marketing practices and adherence of HSE services to its lead role in applying the International Code on Marketing of

Breast Milk Substitutes in relation to marketing of infant feeding products. In particular, NBSIC provided input into:

- Improvements in breastfeeding education and training. Training of midwives and PHNs is now provided through the 20 hour breastfeeding and lactation management courses and updates.
- The development of antenatal teaching packs for distribution to statutory and voluntary providers of antenatal breastfeeding education.
- The development of a standardised HSE Infant Feeding Policy for Maternity and Neonatal Services approved in January 2012. The purpose of this policy was to provide consistently high quality services for patients; avoid conflicting information being given to users and providers of services; ensure legislative and regulatory requirements are met; enable employers and employees to carry out their roles and responsibilities in implementing the policy; act as a basis for audit and evaluation.
- Supporting the maintenance and development of the WHO/UNICEF Baby Friendly Hospital Initiative.
- The piloting and evaluation of the Breastfeeding Policy for Primary Care Teams.
- A review of existing breastfeeding support services provided by the public health nursing service. Particular emphasis was also placed on a review of the curricular content and competency requirements for pre-service and in-service breastfeeding education and the development of subsequent recommendations on competency based standards.
- The commissioning of research to inform policy and practices including the development of a database of Irish infant and young child feeding research evidence collated by the Health Promotion Research Centre, National University of Ireland, Galway (NUIG) and the Infant Feeding Survey in 2008.
- The formation of a data collection sub-group to progress the development of appropriate data collection mechanisms and to influence appropriate ICT strategies in the HSE. However, this was not seen as an effective way of monitoring progress in the medium to long term and no further waves of the survey were supported.
- A watching brief on the development of information systems and proposals to enhance the visibility of breastfeeding within health service infant/child feeding performance indicators.

- The improved timeliness of infant feeding data from NPRS.

Goal 3. Communities support and promote breastfeeding in order to make it the normal and preferred choice for families in Ireland

NBSIC prioritised Action 23 under Objective 3.2 to deliver on this goal. The committee provided input into:

- Commissioning of research on the barriers to breastfeeding for individuals, families and communities with particularly low breastfeeding rates by McGorrian et al (2009).[17] The recommendations of this report related to policies in maternity units and other health care facilities, culture and community.
- A needs assessment to identify local breastfeeding needs and gaps in service provision.
- The continued grant-aiding of voluntary organisations and the expansion/integration of community breastfeeding support services provided by voluntary breastfeeding organisations and HSE PHNs.
- Coordination and development of the annual national breastfeeding campaign and integration of local activities with this campaign during National Breastfeeding Week, with support from the communications section of the HSE.
- The development of themes and messages within the breastfeeding campaign generally in line with findings from consumer research and the activities of existing stakeholders.

Goal 4. Legislation and public policies promote, support and protect breastfeeding

Several advances have been made to protect breastfeeding mothers in public places. NBSIC presided over:

- NBSIC members joined the Baby Feeding Law Group in Ireland established in 2012, in order to advance action 30 objective 4.4 of the Strategic Action Plan.

[17] McGorrian, C. Shortt, E. Doyle, O. Kilroe, J. Kelleher, C. (2009) *An assessment of the barriers to breastfeeding and the service needs of families and communities in Ireland with low breastfeeding rates*. UCD: Dublin.

- Review of the legal protections against discrimination afforded to mothers who are breastfeeding outside their homes in light of developing case law.
- The development and dissemination of best practice guidelines on supporting and protecting breastfeeding in public places.
- Involvement with the protection of breastfeeding within ongoing changes within Maternity Protection Legislation, family friendly workplace initiatives and social partnership.

Goal 5. Irish Society recognises and facilitates breastfeeding as the optimal feeding method of infants and young children

Several actions were progressed under this goal, for example:

- Development of a Breastfeeding Education Resource Pack for Junior Cycle students, disseminated by Social, Personal and Health (SPHE) coordinators and teachers with in-service training provided by SPHE Regional Managers.
- Liaison with the National Parents Council (Primary) with regard to the development of appropriate information materials for primary school children.
- Seeking agreement with the relevant publishing companies/bodies to have breastfeeding-friendly portrayals of infant feeding incorporated where appropriate into schoolbooks and other materials used in pre-school, primary and secondary school settings.
- Development of an information booklet to inform employers, co-workers and employed parents of the key requirements to support breastfeeding in the workplace.
- Areas of concern in relation to media reporting and development of appropriate responses.

4.8 Key points

- The establishment of the NBSIC was delayed, occurring at a time of change coinciding with the establishment of the HSE and the reconfiguration of the health services.
- The role of the National Breastfeeding Coordinator was seen as pivotal to progressing the work of NBSIC and the implementation of the Strategic Action Plan.

- There was limited dedicated financial or human resource (beyond the role of National Breastfeeding Coordinator) made available to support the reconfiguration of breastfeeding promotion and support structures at regional level as envisaged in the Strategic Action Plan.

- The roll-out of the Strategic Action Plan was hindered by the lack of regional leadership structures and the non-appointment of regional breastfeeding coordinators as envisaged in the Strategic Action Plan.

- There was no centralised financial resource to support members in progressing implementation of the Strategic Action Plan and members relied on leveraging support from other regional/local/service budgeting systems or Section 39 grants.

- A lack of engagement by certain key representatives and a lack of continuity among others impacted on the operational capacity and effectiveness of NBSIC.

- The Terms of Reference of NBSIC were comprehensive and clearly defined. The functioning of the committee was consistently supported by a core membership from the HSE health promotion section, public health nursing/nursing and midwifery, community and voluntary sector and the Baby Friendly Hospitals Initiative.

- Committee members considered that NBSIC had been successful in facilitating networking and coordination between stakeholders in the roll-out of new policies in communication matters.

- Committee members reported that fostering engagement on breastfeeding issues across the HSE and within clinical leadership programmes was challenging.

- Committee members viewed that poor high level engagement with the Strategic Action Plan reflected that breastfeeding was a low priority at government level.

- Committee members viewed the Strategic Action Plan as an important step in the development of action-oriented and evidence-based breastfeeding policy in Ireland.

- Committee members identified the need for future policies to be underpinned by strong high level government commitment and for breastfeeding to be embedded as a priority across a range of health services.

- Committee members considered that the work of the committee could be enhanced by input from international expertise.

- Some parties viewed that further NBSIC work should entail a greater commitment to development of training and professional development for health service providers at national level.

- The importance of fostering meaningful and well-supported leadership at national, regional and service levels was emphasised as a priority for any future strategy including investment in the role of peer leaders at community level.

- Committee members expressed concern that placement of the leadership for breastfeeding in the Health Promotion section of the HSE may have limited the mandate to effect change in the context of maternity and primary care services.

- NBSIC was successful in overseeing the development of some enhancements in information and research resources, standardised policy on infant feeding within the HSE and improvements in breastfeeding education and training.

- NBSIC commissioned a small number of research studies to assist with the development of policy and its implementation at regional level but this had not yet extended to evaluations or audits of service provision or practice.

Chapter 5. Progress report

5.1 Introduction

This Chapter provides an assessment of progress with the 44 actions of the Strategic Action Plan; including stakeholder views on the future direction of breastfeeding policy in Ireland. Progress in relation to the government targets for breastfeeding initiation and duration based on analyses of relevant datasets has been presented in Chapter 3.

The assessment of progress across the 44 actions of the Strategic Action Plan is based upon:

- information provided by the National Breastfeeding Coordinator relating to key outputs and developments related to the actions
- information gathered through a structured process of engagement with stakeholders in the field of breastfeeding promotion, support and protection
- stakeholder views on the experience of implementation – the enablers and barriers to progress.

5.2 Methods

Monitoring progress in the adoption of actions relied on both objective and subjective measures. The assessment on progress with the 44 actions is detailed in Appendix 4. This assessment was informed by a number of sources including

- Published reports and papers relevant to practice in breastfeeding in Ireland over the term of the Strategic Action Plan
- Interviews with members of NBSIC
- Interviews and engagement with the National Breastfeeding Coordinator (in post since 2011)
- Interviews with the stakeholders and lead agencies relevant to the implementation of the Strategic Action Plan
- Responses to the online questionnaire sent to a set of stakeholders identified by the HSE to elicit their views on implementation and enablers/barriers to progress

- Invited feedback on a draft table depicting an assessment of progress on the 44 actions from NBSIC.

Objective measures of progress were sought through linkages with the National Breastfeeding Coordinator and NBSIC. Objective outputs included documentary evidence of research, policies and practices relating to the actions. Evaluations of services and initiatives linked to the actions and occurring over the Strategic Action Plan term were also sought as another source of objective evidence. Objective measures of change relating to the actions were also sought during interviews with relevant stakeholders. Subjective assessments of progress were sought through a process of structured engagement with key stakeholders in the field of infant feeding in Ireland. This comprised a series of interviews with lead agencies who were named within the Strategic Action Plan and to whom specific actions had been ascribed as well as those who otherwise occupied leadership roles. In addition the views of a wider stakeholder group were sought using an online questionnaire. All contacts were invited to comment on implementation activities, progress made, enablers and barriers to implementation, perceived effects of implementation and recommendations for future actions. Findings from the interviews and the online engagement are presented separately.

The approach used to engage with key stakeholders in this Review was informed by methods employed by the Public Health Agency in Northern Ireland in undertaking the review of the Northern Ireland Breastfeeding Strategy (Gossrau-Breen et al, 2010).

The Chapter concludes with a summary of views on the future direction of breastfeeding policy in Ireland that takes into account findings from both the interviews and the online engagement.

Interviews

There were nine lead agencies named in the Strategic Action Plan. Due to changes in departmental and organisational structures, the revised list of lead agencies approached for interview was:

1. Department of Health (named in the Strategic Action Plan as the Department of Health and Children)
2. Department of Children and Youth Affairs (not named in the Strategic Action Plan, previously part of the Department of Health and Children)
3. Health Service Executive
4. Baby Friendly Hospital Initiative (coordinator)
5. Health Promoting Hospitals Network (now part of the HSE)
6. Food Safety Authority of Ireland
7. Health Information and Quality Authority
8. Department of Education and Skills (named in the Strategic Action Plan as Department of Education and Science)
9. Department of Jobs, Enterprise and Innovation (named in the Strategic Action Plan as Department of Trade, Enterprise and Employment)
10. Irish Aid (named in the Strategic Action Plan as Development Cooperation Ireland)

In addition, a number of other organisations were identified by the National Breastfeeding Coordinator as having leading roles in the implementation of the Strategic Action Plan. The other organisations proposed by the National Breastfeeding Coordinator and approached for interview were:

11. La Leche League
12. Cuidiú
13. Association of Lactation Consultants in Ireland (ALCI)
14. National Group of Directors of Public Health Nursing
15. Irish Association of Directors of Nursing and Midwifery
16. Baby Friendly Hospital Initiative (committee chair)
17. A representative neonatologist

Interview content was developed by IPH and agreed by the HSE. Content included five 'topline' common questions with the remainder of the interviews structured according to the specific actions linked to that department or agency within the Strategic Action Plan. Due to the number of actions in the Strategic Action Plan, assessment of lead agency views did not extend to all actions in all cases.

Protocols were developed for the initial approach and follow up processes with a view to encouraging engagement and compliance. Interviewees received an email invitation to participate in a semi-structured interview. In the case of non-response within the original three week time frame, further contact was made by email and subsequently by telephone to arrange interviews. Interviews were scheduled to last approximately 40 minutes.

Verbal consent for recording of interviews was sought prior to the interview. This consent included an agreement that the recordings and transcription would be used solely for the purposes of facilitating accurate analysis of the interview responses within the context of the Review and would be destroyed at the end of the Review process. To facilitate open exchange it was agreed that all individual comments would be anonymised at reporting stage.

Four face to face interviews and eleven telephone interviews were completed. Two of the intended interviews did not take place. Four lead agencies (DoH, DCYA, HSE National Breastfeeding Coordinator and the Baby Friendly Hospital Initiative coordinator) participated in comprehensive face-to-face/Skype interviews. Telephone interviews were completed with five of the remaining six lead agencies and with six of the remaining seven organisations proposed by the National Breastfeeding Coordinator as having a leading role. Where interviews included commentary directly related to the NBSIC; these findings were integrated into Chapter 4.

Audio files were saved in accordance with data protection legislation, transcribed and stored on a password protected server and deleted from the recording device. Transcripts were analysed using the same approach as outlined in Chapter 4.

Online consultation with wider stakeholders

In addition to interviews with lead agencies identified in the Strategic Action Plan, broader engagement with stakeholders relevant to breastfeeding policy and practice was sought. A contact list of key stakeholders developed by the National Breastfeeding Coordinator was provided to the IPH project team.

An online questionnaire was devised. The content of the questionnaire was revised extensively based upon feedback from the National Breastfeeding Coordinator and a mixed grouping pilot of four respondents. A final questionnaire was approved by the National Breastfeeding Coordinator. Questionnaire design aimed to foster wide engagement and as such was limited to 10-15 minutes completion time. An email was sent to the contact list of 460 stakeholders inviting responses within a six week period. In agreement with ALCI, the email was forwarded by the Association to approximately 100 lactation consultants on their membership list. A number of non-valid emails were returned from the initial mail-out and contact details were revised and resent. A reminder email was circulated on two occasions.[18]

Limitations

Assessment of progress with actions specified in the Strategic Action Plan was challenging. There were a large number of actions spanning many aspects of breastfeeding promotion, support and protection. Most actions lacked a specified and measurable indicator of progress.

In addition, there was little relevant documentary evidence relating to what represented routine practice at baseline and at the end of the Strategic Action Plan term. As such, evidence of change relied principally on the subjective assessment of key stakeholders in the field of breastfeeding promotion and support rather than any formal evaluations or audits. The process of online engagement cannot be considered as a nationally representative assessment of the views of stakeholders; the sample was based upon contacts provided by the HSE National Breastfeeding Coordinator.

While the assessment of progress with the actions of the Strategic Action Plan was informed by a number of sources, it is important to note that there was no specific component which allowed for engagement with the general public including expectant and new mothers and their families.

[18] A total of 370 responses were recorded and data were exported into Excel for data cleaning and analysis. Data were stored in accordance with data protection legislation on a secure password protected server. Data cleaning was completed, resulting in 312 valid responses. Quantitative analysis was undertaken using SPSS software. Free text responses were analysed and categorised according to themes using the thematic analysis approach as also used for Chapter 4.

5.3 Results: Interview findings

Interview transcripts and audio files were analysed. The approach to analysing the review of NBSIC detailed in Chapter 4 was also used to analyse interviews for this phase of the Review. This approach identified five key themes and related sub-themes emerging from interviews. An overview of the main themes emerging from the fifteen interviews is presented in Table 5.1 below.

Table 5.1: Themes emerging from interviews

Policy Structure	Service Structures	Culture	Messaging	Commercial Interests
Priority and engagement	Policy to implementation/ mainstreaming	Socio-cultural, family and generational	Information – clarity, reach	Government level
Context and integration	Services cascade and roles, coordination	Policy level	Consistency	Industry level
Resource	Service pressures and resource, skills/training	Health services	Media roles	Health service and staff
Policy cascade – national to regional to local	Evaluation and service user perspectives	Change management		Awareness

Policy structure

Summary of key themes

Interview responses emphasised the issue of the policy environment for promoting and supporting breastfeeding in Ireland. It was acknowledged that significant reform in health system structures had occurred over the Strategic Action Plan term, including the transfer of responsibility for overseeing implementation of breastfeeding policies from DoH to the HSE. Concern was voiced that breastfeeding was seen as low priority. This was felt to have created issues with fostering engagement with implementation at all levels. A low level of human and financial resourcing was considered by some to be a consequence of the low level of priority afforded to the issue. A perception was evident among some interviewees that roll-out of national policy was also hindered by a 'bottle-neck' due to lack of designated regional and local structures to progress the actions of the Strategic Action Plan.

Findings

Interviewees perceived that the issue of breastfeeding was not given priority at governmental level, with a perception of limited departmental and cross-government commitment to addressing the promotion, support and protection of breastfeeding in Ireland.

'The first thing we need is government commitment to breastfeeding.'

There was a perception that the implementation of the Strategic Action Plan lacked a cohesive response from government in terms of embedding breastfeeding promotion across all aspects of government policy.

The role of the National Breastfeeding Coordinator was seen as essential to spearhead the work and progress engagement with breastfeeding policies at a national level. The national strategic focus that has been given to breastfeeding was welcomed, but there was a perception that the Strategic Action Plan lacked traction across the HSE as a cross-cutting component of programmes relating to child health, maternal health and nutrition as well as within programmes relating to the prevention of communicable and non-communicable disease. It was acknowledged by one lead agency that breastfeeding, albeit an important area of work was not considered a priority within their organisation due to other responsibilities.

Lead agencies emphasised that breastfeeding has not been fully positioned as a public health issue and as such was not supported at multiple levels and in multiple settings. According to one respondent

'The whole community needs to see it as a priority'

There were calls for ministerial and governmental leadership on breastfeeding, similar to the approach taken to tackle obesity, so that

'Breastfeeding becomes the business of everybody'

The lack of adequate structures to support meaningful monitoring and evaluation of the Strategic Action Plan was considered a limitation to implementation along the lines of 'what gets measured gets done'. There were concerns that the reporting mechanisms related to the Strategic Action Plan were not fully defined across the new structures with some confusion as to who needs to know about progress and at what level the monitoring should be occurring.

In addition, there was a lack of clarity relating to expected deliverables and the means by which progress with policy actions would be followed-up.

> *'The strategy was produced and wasn't really raised regularly or flagged on a regular basis with the services'*

> *'I think, positively, the strategy has you know, laid down very, very definitely….where we needed to look at issues …. there's a lot done but there's still a lot to do in terms of … the policy itself……I don't know really, given today's financial constraints, how successful it can be without buy-in from everybody?'*

There were mixed views in relation to the most appropriate policy context for a breastfeeding strategy. The assignment of leadership for the implementation of the Strategic Action Plan from DoH to the HSE was not uniformly viewed as appropriate. In this regard, the leadership role of the HSE health promotion section was considered pivotal in terms of the implementation of health services actions in the Strategic Action Plan but was also considered limited in terms of progressing breastfeeding in other non-health service domains and compounded a lack of any real change at community level and within wider society. Some interviewees were of the view that the Breastfeeding Strategy should be a

> *'cross governmental multi-agency rather than a HSE strategy'*

Enhancement of the priority given to breastfeeding by DoH and DCYA was seen as important in moving forward on breastfeeding in the future and raising the profile and engagement with infant feeding policy and practice.

The lack of a national maternity policy and the lack of a specific infant and child national nutrition policy in Ireland were identified as gaps in the policy structures needed to support implementation of the actions. Whilst it was noted that there was good support from the Health Promotion Division of the HSE, a perception of limited reach and engagement in allied policies such as public health, child health and maternity care was evident. There was also a perception that the responsibilities of different sectors and settings were not fully defined, although the development of the HSE Infant Feeding Policy for Maternity Services was viewed as a significant development in this regard.

Although there was some disappointment expressed at the lack of any mention of breastfeeding within *Healthy Ireland*, there was a general view that the approach set out in *Healthy Ireland* was welcome and could facilitate the cross-sectoral working needed to further increase the rates and duration of breastfeeding. In addition, the development of early years policies by DCYA was seen as a potentially important vehicle to progress infant feeding policy and practice.

There were practical issues relating to the number and nature of actions set out in the Strategic Action Plan with some considering the actions to be very broad and ill-suited to meaningful monitoring of progress. Prioritisation based on limited resources was a challenge and this was compounded by a lack of information to inform priorities.

> *'It would be lovely to be given the kind of money that the anti – that the smoking is given and because I would very much feel that this is a public health imperative. And that this is about the long term health of our children and young adults going into the future and it just isn't getting the resources that it should be getting…… They are not expected to do it voluntary in the smoking sector. They are not going to be expected to do it in the obesity sector, why should breastfeeding be the poor relation?'*

A tendency for heavy reliance on voluntary time commitments for breastfeeding promotion and support was noted. Some interviewees considered also that the level of reliance on the voluntary sector to support implementation had increased over the term of the Strategic Action Plan. While some interviewees viewed this as a positive development the need for effective statutory provided services was universally endorsed.

Service structures

Summary of key themes

Service structures were a significant theme in discussions on enablers and barriers to Strategic Action Plan implementation. There were common areas of concern with regard to policy and service structures, leading to a policy-implementation gap. The human and governance interface between policy and service structures was limited. However, there were examples of progress in translating policy into practice and BFHI was seen as an important

mediator in this regard. The absence of regional coordinator and specialist roles, and systems for audit and evaluation, within maternity and community services were identified as barriers to translating policy into practice. Systems to facilitate service user perspectives were viewed as underdeveloped.

Findings

Despite the international evidence on what is known to support breastfeeding, some sectors of the health system were considered to be reticent to both accept and adopt evidence-based policy, hence creating a policy-implementation gap. It was noted that the Strategic Action Plan was a useful guiding document; in some places it is unclear how different sectors could move forward on actions within their own services, settings and organisational structures. Regional implementation plans were due to be produced, but these plans were not developed.

The development of the HSE Infant Feeding Policy for Maternity and Neonatal Services was seen as a significant development in the move towards standardised breastfeeding policy in maternity and neonatal care units. Issues of inconsistency between and within maternity hospitals were considered to be lessened by its development. While national policies and guidelines were viewed as useful, it was considered that further implementation requires regional leadership and tools suited to a range of service structures.

> *'We have the infant feeding policy but we now need audit tools to support the implementation of that….certainly the hospitals have been busy and staff difficulties have meant there is less contact time for mothers'.*

Some interviewees considered that the support system for women in the first two weeks after giving birth was not of the standard needed and falls short of both evidence-based practice and the guidelines set out at European level and within the Global Strategy for Infant and Young Child Feeding (WHO and UNICEF, 2003). While some evidence is available on practice within maternity hospitals from BFHI, it was acknowledged that the level of coherence between policy and practice was unclear. There was no nationally representative documentation on what was current practice in this regard in 2005 or in 2010 and an objective assessment of progress was not possible. In particular, stakeholders emphasised the importance of all women receiving immediate postnatal support in hospital and community settings.

'If she [mother] *doesn't get the initial "in touch", if she gets the first week and she gets into the second week and she is still getting no support in the community she is likely to fail'.*

BFHI was considered instrumental in supporting breastfeeding in Ireland over the term of the Strategic Action Plan. Whilst BFHI was deemed successful, it was suggested that the endpoint should be adoption as part of mainstream service quality standards rather than its continuation as an external initiative in the long-term.

The development of a community midwifery service was considered to be incomplete and a substantial barrier to implementation of actions on breastfeeding. It was acknowledged that leadership on improvement in breastfeeding practice had occurred both within maternity and community settings. However, this had largely occurred within the context of voluntary activity undertaken by both statutory health service providers (principally nurses and midwives) and voluntary groups.

'There are still a lot of individuals from hospital managers to clinicians on the front line who are still willing to be involved, to put a lot of time in, often to put their own time in outside of work time'.

'In the hospitals that don't have clinical midwife specialists, I think virtually all the contact people are doing Baby Friendly work in addition to their full regular case load…so in effect, they're probably doing it as volunteers after hours and so on, which is why there is some difficulty in sustaining it'.

There was some concern that there was an insufficient publicly funded workforce available within the system to support breastfeeding. The provision of specialist support from lactation consultants at hospital and community level was considered patchy. It was reported that around 40% of hospitals have a clinical midwife specialist or clinical midwife manager in lactation/breastfeeding in post and some are not full time posts. The ALCI provided evidence on the uneven and inadequate provision of lactation consultants in maternity hospitals.

'Lactation consultants have a very key role that they can play. But they need to be utilised. I certainly think that, like globally the issue needs to be upped in terms of coming further up the political agenda, in terms of health promotion. You know, this

is something that is cost neutral…. But it does require strategic thinking in terms of embedding it across departments within the government. It needs to become a priority really'.

It was suggested that at present the entire health service was not ready to take responsibility for breastfeeding; rather there are pockets of good practice.

'It would certainly help to have specialist posts in the hospital and the community, specialist lactation posts, IBCLCs, community midwife specialists and that support is from antenatal right through birth through supportive maternity units and support in the early postnatal period including the voluntary breastfeeding organisations'.

The role and engagement of physicians was identified as an area of concern in terms of the implementation of the Strategic Action Plan. It was considered that the role of obstetricians and primary care physicians with regard to breastfeeding support was ill-defined and that there was a lack of awareness of referral pathways for further hospital-based and community-based supports for breastfeeding mothers. The aspiration for greater engagement of primary care teams in breastfeeding promotion and support was highlighted. Enhanced training opportunities and greater support for primary care teams in their role of supporting breastfeeding mothers was identified as an area for future development. In addition it was considered that many doctors involved in the care of women during the antenatal and postnatal period may underestimate their own importance as a powerful influence on the infant feeding decisions of mothers under their care.

Collaborative working between statutory bodies and voluntary organisations was considered by some interviewees to be an effective process to support breastfeeding. It was reported that in some areas there are effective working relationships with mutual referrals between local healthcare professionals and voluntary organisations. However, in some cases there was misunderstanding about the roles and perceived effectiveness of different service providers.

'In some areas there's been tremendous support from local health professionals and there's a mutual referring backwards and forwards….but then in some areas some healthcare professionals almost see [the voluntary organisations] *as almost competition, not as a resource that can be used for both of us to help the client…I*

think if we could remove that feeling and that we're all coming from the same place and we all have the same desire that a mother would be able to continue breastfeeding, I think that would help immensely'.

National Breastfeeding Week was considered a valuable opportunity in bringing together healthcare professionals and voluntary organisations. The various events which were hosted throughout National Breastfeeding Week facilitated networking and sharing information. The need for ongoing collaborative working was further highlighted with calls for greater engagement with the Strategic Action Plan and identification of roles to deliver specified actions.

'We need everybody sort of working together and just saying - what is our role with the Strategic Action Plan?'

Service pressures and limited staff resources were identified as a significant barrier in the implementation of the Strategic Action Plan. Service pressures related principally to an increased number of births and limitations on the level, availability and skills of healthcare staff to support breastfeeding mothers in both hospital and community settings.

'staff is so under-resourced in the HSE that they actually don't have time to be sitting talking to women giving them full impartial information'.

'I think the biggest factor in certainly in complaints that we deal with from women that didn't successfully breastfeed is the staffing resource that is available to them'.

The moratorium on staffing within the HSE was seen as adding challenges to implementation and the allocation of specialist roles.

' ... it is a problem, in the sense that an awful lot of pressure is put on them in relation to other priorities, in ... clinical priorities and things like that'.

The capacity to prioritise and support a hospital environment which is supportive of breastfeeding was hindered by service pressures. Issues relating to a rushed atmosphere in maternity hospitals, shortened length of stay and perceived inadequate provision of general and specialist midwives were perceived as barriers to implementation. In addition, issues of overcrowding and lack of privacy were raised.

'The hospitals are doing their very best I suppose in the 19 maternity units to facilitate it, but things that mitigate against it are staffing levels and overcrowding and lack of privacy. But they are being addressed as much as possible in infrastructure development'.

Another important consideration for those managing and commissioning healthcare services is the allocation of staffing to particular roles within maternity services. For example it was reported that

'....in reality you know as a director looking at your services, it [breastfeeding] *probably isn't where you would put your priority. You would probably look at your labour ward and your staffing there'.*

'They are the three main factors and conversely the things that go against it is inadequate time in the hospital, inadequate support from a midwife and the lack of a community midwifery service. If there isn't a community midwifery service in the hospital or supporting a hospital that really mitigates against somebody breastfeeding successfully'.

At community level, the importance of the role of breastfeeding support groups operated by PHNs and by voluntary groups was emphasised. It was perceived that the Strategic Action Plan actions had provided a greater mandate for the expansion of both community based supports led by the voluntary sector groups and PHN-led breastfeeding support groups.

'We should never underestimate the value of support groups. How much they can help mothers and families for maintaining breastfeeding and I think we've seen an, well not an explosion, but a growth in support groups over the last few years, I think that's been very positive… and with the education we have a more informed and a more educated group of public health nurses now than we used to have'.

It was evident that the level and quality of services provided by voluntary organisations had indeed expanded during the term of the Strategic Action Plan.

La Leche League of Ireland is an all-island voluntary organisation that has been operating in Ireland for over 50 years. In 2012, La Leche League of Ireland provided 26,937 telephone support contacts to breastfeeding mothers in the Republic of Ireland; had 4,231 attendees at

their breastfeeding support meetings, and responded to 2,904 web queries from breastfeeding mothers. In addition, 481 queries were responded to through seven Facebook pages. In 2012, 108 volunteers received training and skills development. La Leche League contributes to the development of breastfeeding practice and networking by organising an interdisciplinary annual conference with presentations and workshops on breastfeeding issues and parenting, attended by parents, leaders and health care professionals.

Ciudiú was established as a parent-to-parent support group in 1983 and has around 19 branches in Ireland. Ciudiú leaders undertake a 30 month programme for their role in antenatal education and support, and there is a 20 module breastfeeding counselling course. In 2011, 82 Cuidiú counsellors supported 1,838 mothers through 540 support group meetings, 79 home visits plus 7 hospital visits. In 2012, 22 new breastfeeding counsellors were in training. Forty training enquiries were received and new training courses were set up in the South consisting of members from Tipperary, Limerick, Cork and Waterford, and the North West (Leitrim, Mayo, Sligo, Galway and Donegal).

Both the La Leche League and Ciudiú operate their services through the involvement of trained volunteers and their work is resourced through fundraising, membership fees and a HSE Section 39 grant.

There were varying views on the statutory support provided to the organisations and the level of services provided directly through statutory health services. While some parties questioned the appropriateness of voluntary organisations becoming the principal form of breastfeeding support to mothers in some communities, others endorsed this approach as a means to support breastfeeding in a less medicalised and equally effective way.

> *'And because we are lay peer counsellors we are not seen to actually be medical so really what use are we and so that is coming from that HSE that you know we wouldn't have evidence-based information because we are only lay people anyway. So that is not really understanding and taking the time to understand what we actually do and the training that our girls go through'.*

Staff training was identified by lead agencies as a contributory factor for the promotion of breastfeeding. However, there was a sense of limited uptake of training by sectors outside

nursing and midwifery. One further challenge is the capacity to release staff to attend training. It was reported that

> *'less and less are healthcare professionals being released for ongoing training, breastfeeding is seen as something that's sort of an optional extra'.*

It was suggested that there should be an extension of training in order to be tailor-made to meet the needs of staff in different roles.

> *'So we should really look at modifying the standards of practice and the courses that we deliver and make them more appropriate, tailor-make them to the need of the specific group..... I don't think that it is right to have only one standard, i.e. four days or nothing, and that is an impediment'.*

It was noted that significant improvements have been made in undergraduate training to ensure that skills are standardised and transferable between hospitals.

> *'Breastfeeding training should ... engage all disciplines, with training at delivered undergraduate, postgraduate and continuing education level to ensure that consistent information and support is provided'.*

Stakeholders highlighted a number of examples of professional development/clinical clubs in operation as well as comprehensive training programmes for all types and grades of staff that might be considered as models of good practice.

The challenges implicit in meaningful evaluation of the Strategic Action Plan were raised within the interviews. Of particular concern was the inability to effectively monitor aspects of breastfeeding duration. GUI was commended as a valuable source of longitudinal data. In contrast, the lack of progress with standardised administrative data systems relating to child health and development was a source of frustration in some cases.

Significant progress was noted in terms of the timeline of publication of data from NPRS. Linking child health and maternity information systems was identified as essential to monitoring breastfeeding rates and the longer term impact on child health, but felt to have progressed little since the inception of the Strategic Action Plan.

'On the information front, there does seem to be some progress…there does seem to be traction around that now….some places have got reasonable data and reasonably timely and other places it's like a manual paper exercise for them to do it and it's just not good'.

The need for further involvement of service users as well as service providers in policy and service development emerged as an issue within the interviews. The HSE consumer research was seen as a positive development that highlighted the value of linking with pregnant and postpartum mothers and their families. HSE consumer research was beneficial in developing a breastfeeding campaign and determining the type of information that mothers and families needed. The consumer research was also valuable in helping to address complaints and develop patient advocacy.

'A mechanism to feedback whether families feel they have the knowledge, skills and support to make and carry out informed feeding decisions'.

The lack of information on breastfeeding experience of health service users was highlighted and there was perceived to be limited opportunities for engagement with families about their hospital stay and the level of support they received in relation to breastfeeding. Interviewees acknowledged the HSE 'Your Service Your Say' online facility which is currently available for patients to comment on their experience of healthcare delivery. However, concerns were expressed about how likely mothers are to write about their hospital experience, particularly when they have just had a baby.

'opportunities for feedback through patient advocacy as well… could add a lot to the committee…regular feedback'.

'It's what are the mothers saying on the ground? What's happening on a daily basis with them? What happens in hospitals, that was the case that dissuaded them from breastfeeding or did they have an issue? Those kind of practical things and feeding them back to you, or feeding them back to whether it be the midwives, maybe there should be more meetings with staff and voluntary organisations, or whoever, but that nobody is sort of working on their own'.

Culture

Summary of key themes

The issue of prevailing infant feeding cultures was a dominant theme in discussions on barriers and enablers to progress. Approaches to address this issue were considered by some as ill-defined and challenging, including within the actions of the Strategic Action Plan. The complexity in addressing cultural barriers to breastfeeding was acknowledged and a somewhat fatalistic attitude was apparent with regard to change. There was considerable appetite for a positive media campaign and for change management approaches to address aspects of infant feeding culture and consequent practices in the health services.

Findings

> *'I still believe that a lot of Irish women don't view it* [breastfeeding] *as an option for them'.*

It was recognised that embarrassment remained a significant barrier to breastfeeding. Infant feeding beliefs and cultures were considered to be strongly related to the family and community of the mother and this was a particular barrier to addressing inequalities in breastfeeding.

> *'There's still a very strong class base in terms of breastfeeding…working class women or women from poorer backgrounds think it's very immodest and all the middle class encouragement doesn't change that…telling them it's better for them or for their baby…doesn't make it any less embarrassing....the big issue is culture'.*

Concerns were also raised about possible declines in the number of mothers of non-Irish origin deciding not to breastfeed, contrary to their culture of origin. It was perceived by some that the culture and norms of Irish society were already influencing women who would otherwise have breastfed.

> *'The most important thing is what happens in the community. The most important thing is what happens to change the culture and the acceptance of breastfeeding as a norm'.*

In certain instances, the portrayal of breastfeeding mothers as well as the voluntary groups that support them was influenced by misconceptions and stereotypes rather than an acceptance of breastfeeding as a normal and natural practice.

The importance of partners and grandparents in supporting breastfeeding was recognised by many interviewees. While the importance of these parties was recognised, it was also acknowledged that involvement of wider family networks was not standard practice and as such this may represent an under-utilised resource. Intergenerational loss of breastfeeding skills and acceptance was seen as a barrier to achievement of actions in the Strategic Action Plan.

> *'The skills that would have been passed on from mother to daughter are lost because we lost almost two generation of breastfeeding women, and these need to be provided externally'.*

> *'There are still an awful lot of girls whose mothers say to them, or mothers-in-law say to them are you sure he's getting enough?'*

Increasing breastfeeding rates among lower socioeconomic groups was a specific target of the Strategic Action Plan. However, interviewees perceived little progress had been made in this domain. Barriers to increasing breastfeeding rates among lower socioeconomic groups were considered as rooted in cultural acceptance of formula feeding as the norm as well as the availability of free formula milk and inequitable access to breastfeeding support.

It was suggested that a media campaign could be one way in which to address culture change. Representatives from the lead agencies highlighted the need to 'normalise' breastfeeding by presenting it as a positive experience. It was considered that the absence of a comprehensive large scale promotion campaign had hindered aspects of promoting awareness and normalising breastfeeding. However, the lack of funding and the challenges implicit in delivering effective messages for such campaigns was highlighted.

> *'Keep it focused on the positivity around breastfeeding and the positive experience for the woman and you know make it a more kind of encouraging and normal thing to do as opposed to you know maybe trying to push it on people'.*

Some interviewees considered that greater awareness and public acceptance of breastfeeding could be aided by legislation to protect women breastfeeding in public places and the extension of breastfeeding/lactation breaks in the workplace beyond six months. However, there are conflicting views among stakeholders as to whether or not legislation is the most appropriate approach in terms of protecting and indeed normalising breastfeeding and also the messages implicit in developed breastfeeding facilities rather than encouraging breastfeeding as a normal and acceptable public activity.

The issue of 'health service culture' was raised as both a potential enabler and barrier to the implementation of actions in the Strategic Action Plan**.**

> *'There is I suppose a culture within a service so whether the staff themselves, the midwives themselves are fully supportive of them, because often you can find some that are very supportive and then you find others who aren't'.*

It was considered that change management processes had demonstrated value in the introduction of enhanced breastfeeding policy within the maternity hospital setting.

Messaging

Summary of key themes

A number of important issues were highlighted in relation to infant feeding information and the way in which we communicate with mothers on infant feeding decisions. There were considered to be significant developments over the term of the Strategic Action Plan in the consistency, clarity, reach and appropriateness of information. There were ongoing challenges noted in terms of negative/polarised media portrayals and the use of overt and covert messaging about the value of breast and formula milk by commercial companies.

Findings

Approaches to supporting positive infant feeding decisions during the antenatal period were discussed as a core element of achieving progress.

> *'That's half the battle, you have to get mums thinking about breastfeeding. And so often they've decided not to breastfeed almost before they're pregnant, almost before they know, they've decided not to breastfeed'.*

The development of the HSE Infant Feeding Policy for Maternity and Neonatal Services was seen as a positive development – providing a clear standard for antenatal discussion of infant feeding decisions. Inconsistent messaging around breastfeeding was perceived as a barrier to effective promotion of breastfeeding.

> *'through the evaluation of the breastfeeding policy within the primary care teams, GPs, practice nurses, were identifying the antenatal period as a time when they have opportunities to have discussions on infant feeding with women but they are not utilised as they could be and often it is not mentioned'.*

> *'there needs to be standardised antenatal education and information, with hospital and community'.*

> *'The other impediment is in addition to communicating one single message. You have multitude of messages. The paediatrician will say one thing, the midwife will say another thing, GP will say a third one and the practice nurse will say another thing, and so on so forth, and the granny also has a say. So, we don't have a single message on it and even if it is not a single message, we don't have kind of an agreed set of messages about it'.*

The clarity of the message was an important issue. Interviewees commented on the importance of clear communication around the importance of breastfeeding in terms of duration and exclusivity.

In addition, emphasis was placed on the need for education and information around breastfeeding before a woman becomes pregnant, i.e. during primary and post-primary education. In relation to breastfeeding promotion in schools, a teaching resource was developed as part of the SPHE curriculum but the degree of uptake of the module was unclear. Attention was also drawn to images of formula feeding dominating school resources and present formula feeding as 'the norm'. The need to address this issue was raised by a number of lead agencies, with an emphasis on promoting breastfeeding through early child literature and adopting a joined-up approach to breastfeeding promotion in schools.

Significant developments in information resources and messaging were evident over the term of the Strategic Action Plan. Notable developments related to the development of common

leaflets by grouped organisations, the development of a single national breastfeeding website and the development of themed Breastfeeding Week messages that were informed by consumer research

> *'Advertising works….it appears there's no funds at all being out into it, because anything that is done in terms of you know media campaigns, public information, again, is either confined to National Breastfeeding Week, is delivered within the, say the maternity care services, but isn't included in terms of wider society'.*

> *'our information leaflet was developed jointly with the HSE, Association of Lactation Consultants, BFHI and Cuidiú, La Leche League and Friends of Breastfeeding…so it was developed jointly to ensure that the information is consistent across the agencies as well'.*

> *'our message has changed this year. The message was that every breastfeed makes a difference, from the consumer research we found that many women don't meet their breastfeeding goals with huge feelings of failure and guilt when they don't…a feeling that a lot of the campaign messages can be aspirational and don't acknowledge the reality of women's lives. So the need for more real kind of images, more supportive messages came across'.*

> *'getting messages to parents without being patronising, which is you know very challenging and that they're actually the messages they need to hear as opposed to the ones that ...a middle class parent think other people need to hear'.*

The role of the media in promoting, normalising and supporting breastfeeding was raised. This was generally considered to be a barrier to implementation of aspects of the Strategic Action Plan. The generation of 'us and them' style debates around breast and formula feeding was seen as particularly unhelpful. In addition, heavy use of both traditional and new media for promotion of breast milk substitutes in Ireland was noted. The lack of media guidelines on the portrayal of breastfeeding was considered a barrier to the development of balanced debate on infant feeding decisions. There was an associated action on media information resource within the Strategic Action Plan, but this was not progressed.

'I think the difficulty is that some of the people who speak out about it, they are at the extreme ends, it is the "Oh I fed mine until they were four" now that's fine but that just puts people off'.

'the media takes the approach that they set up a pro- and anti-breastfeeding debate whether it is in print media or if it is on television or radio… I think that is unhelpful'.

Commercial interests

Summary of key themes

The issues of commercial interests and the promotion of breast milk substitutes in Ireland were raised in the context of progress with the Strategic Action Plan's actions on the protection of breastfeeding. There were varying perceptions on the level of compliance with the International Code on Marketing of Breast Milk Substitutes ('the Code') and the adequacy of related monitoring. Some progress was noted in terms of removing marketing from maternity hospitals, however, the operation of marketing in television and new media was thought to have expanded. Free formula in hospitals and expansion of follow-on milk marketing were issues of concern.

Findings

Ireland's role as a major exporter of milk products for the infant formula industry and the value of this sector to Ireland's economic recovery was raised by stakeholders in terms of government and political priorities. Furthermore, significant investments were noted to have occurred over the period of the Strategic Action Plan in developing Ireland as a hub for research and innovation on the development of infant formula and follow-on milk products.

'If you develop another breastfeeding strategy, you need to get the Department of Agriculture on board and not do it in isolation in the Department of Health …… you need to get the Department of Agriculture on board in anything because otherwise you'll find economic interest being out before public health'.

There were varying perceptions on the level of compliance with the Code and the meaningfulness of the systems to monitor and review the Code. Concerns were raised by some interviewees in terms of the limited reach of current legislation to address the

promotion of follow-on milk products and the advertising of infant formula products intended for special medical purposes. However, it was also acknowledged that any changes in the legislative basis regulating the marketing of breast milk substitutes in Ireland would require a European solution. It was perceived by some parties that there was a

> *'hesitancy to enforce existing legislation or tighten up the existing legislation because this would impact negatively on the industry'.*

The distribution of free infant formula by health services was raised as a significant barrier to the implementation of the Strategic Action Plan.

It was generally considered that adherence to the Code had improved over the term of the Strategic Action Plan. However, it was considered that practice varies across different sectors of the health service. Corporate sponsorship of health professional events was an ongoing concern and the appeal of this sponsorship was heightened by tightening of statutory budgets.

> *'It is down to individual organisations, hospitals or organisation to argue that one and to support the Code and to make sure that it is upheld in each organisation, but that is a struggle'.*

> *'Well we discourage medical reps, or whatever, from coming in to speak to public health nurses and we discourage public health nurses to avail of any lunches to any of those kind of advertising things'.*

In addition the display of infant formula branded information leaflets in pharmacies and primary care settings was considered commonplace. Other areas of ongoing concern related to sponsored articles in magazines linked to professional associations and with a health professional readership.

It was noted that a Baby Feeding Law Group was established in 2013. This group intends to enhance the monitoring of potential violations of the Code and work towards legislation that supports informed choice on infant feeding that is as free as possible from commercial interests.

5.4 Results: Findings from an online survey

Overview of respondents

This survey was completed by a group of stakeholders involved in infant feeding policy, practice and research based on a list of contacts as provided by the HSE National Breastfeeding Coordinator. The survey is therefore based on an opportunistic sample and cannot be considered a representative assessment of views.

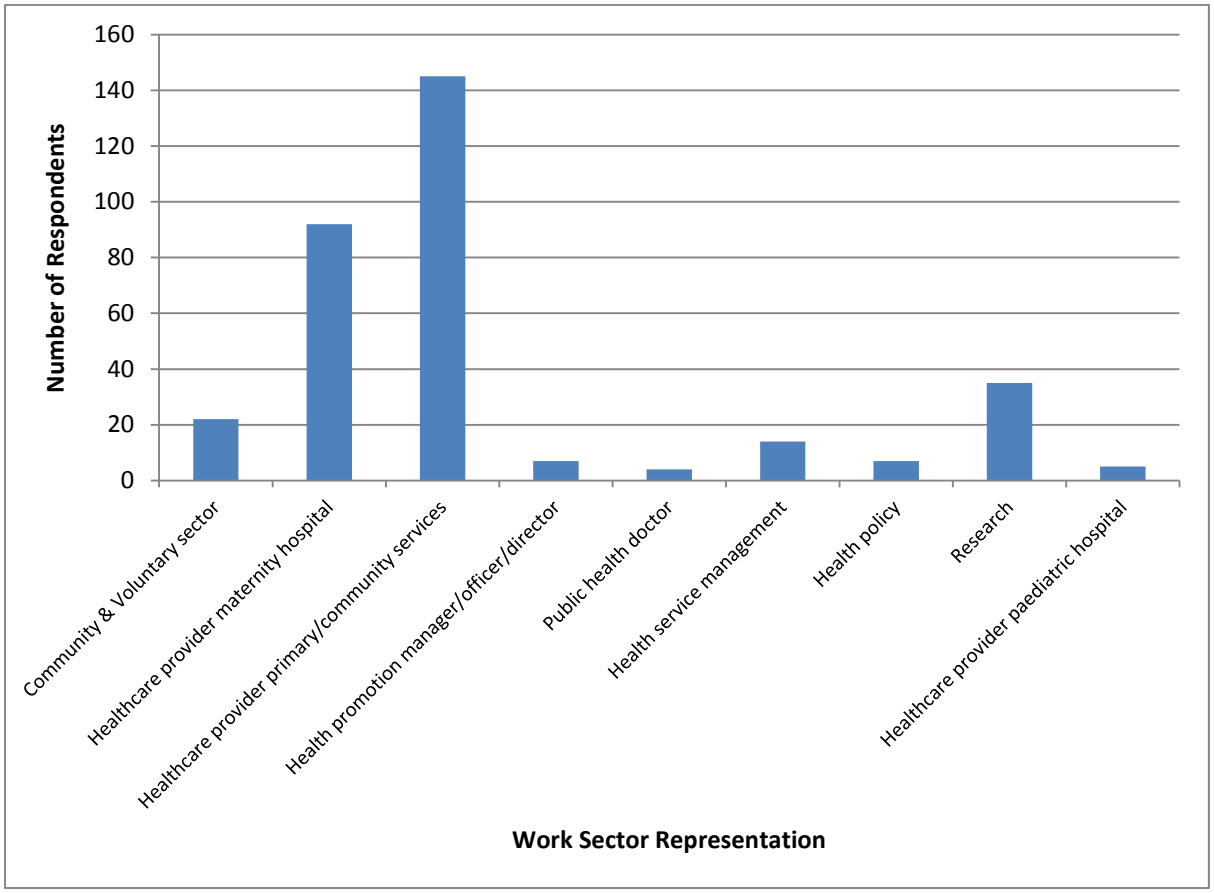
Of the 460 stakeholders who were invited to participate in the online survey, 370 responses were received, of which 312 were deemed valid responses. Findings are presented based on frequencies of valid responses to multiple choice questions. While some additional comments on future policy development were included in this chapter, Appendix 5 provides an overview of additional comments by respondents to the free text section.

Of the 312 valid responses received, 238 respondents indicated that they were responding to the questionnaire as an individual, 72 responded on behalf of their organisation and two respondents did not indicate how they were responding.

Respondents were asked to indicate from a pre-determined list, which sector best described their work. Respondents were able to select more than category, and where supplementary information was provided in a free text box this led to the creation of another category – 'Healthcare provider paediatric hospital'.

The majority of respondents (n=145) were from the 'Health care provider primary/community services' sector, followed by 92 respondents reporting to work as health care providers in a maternity hospital. The other main sectors represented included research, health service management and the community and voluntary sector. Figure 5.1 illustrates the distribution of respondents across the various sectors represented.

Figure 5.1: Response to online questionnaires – area of work (frequencies)



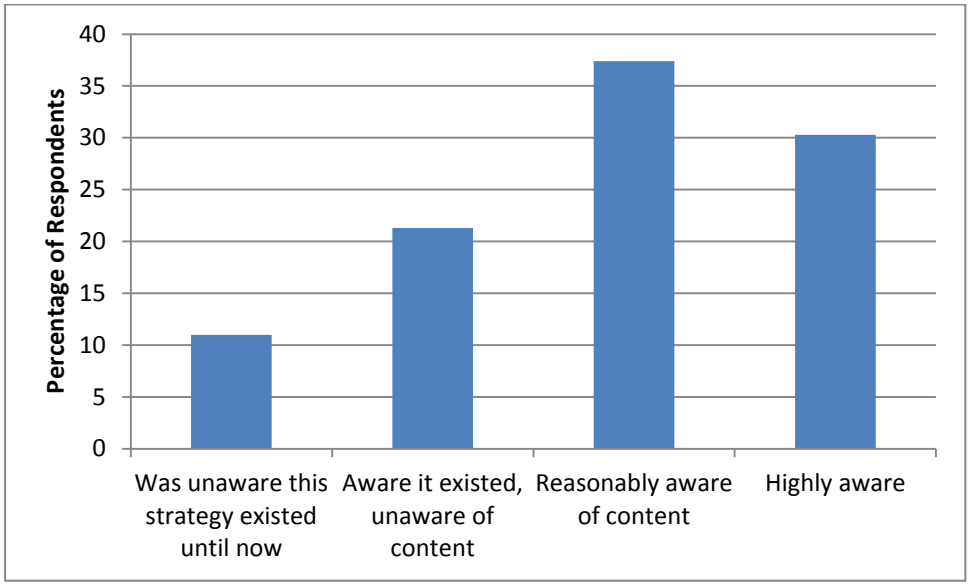
Respondents were asked to indicate how their work supports, promotes or protects breastfeeding in Ireland. The most common additional information (n=5) was involvement with a breastfeeding support group. The most common ways in which respondents' work contributed to breastfeeding was through direct support for women trying to continue breastfeeding in the community (15%); promoting breastfeeding through antenatal education and support (13.4%); supporting breastfeeding in the workplace (12.2%); supporting change in health services and their policies to better support breastfeeding (11.7%); and providing direct support for women to initiate breastfeeding (11%). (See Table 5.2).

Table 5.2: Nature of respondents' work in the support, promotion or protection breastfeeding in Ireland

Breastfeeding related work	Percentage of Respondents
My work in not directly related to breastfeeding	6.1
I promote breastfeeding through antenatal education and support	13.4
I provide direct support for women to initiate breastfeeding shortly after birth	11
I provide direct support for women trying to continue breastfeeding in the community	15
I provide training to health care professionals relevant to breastfeeding	9.2
My work includes supporting change in health services and their policies to better support breastfeeding	11.7
I monitor and report potentially inappropriate marketing of breast milk substitutes in Ireland	5.5
I develop information resources for mothers and their families related to breastfeeding	5.3
I'm involved in research/information systems relevant to breastfeeding	6.2
I'm involved in the development, monitoring or review of national/regional policies relevant to breastfeeding	4.4
I'm involved in supporting breastfeeding in the workplace	12.2

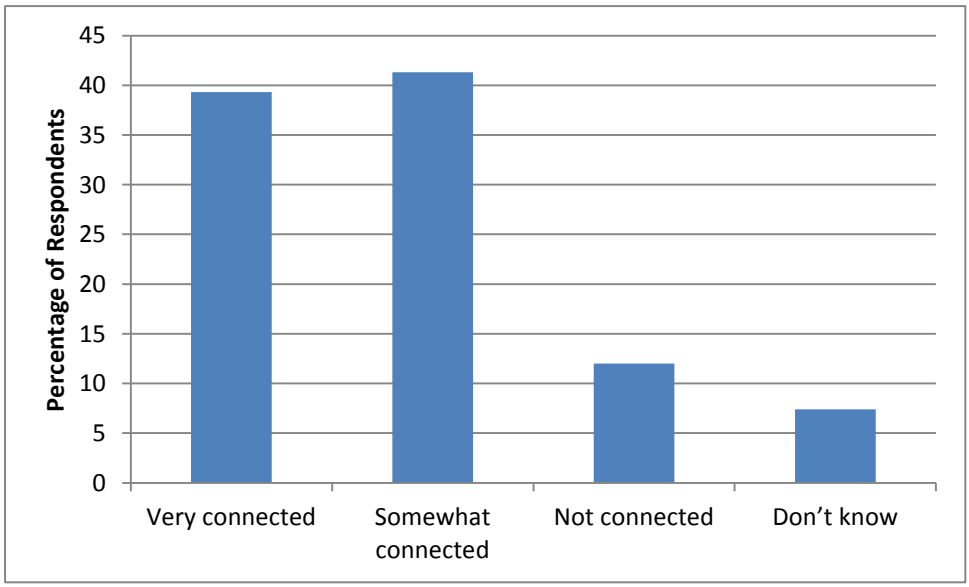
Respondents were asked to indicate their overall level of awareness of the five high level goals of the Strategic Action Plan. Four categories were provided and the responses are illustrated in Figure 5.2. Over a third of respondents (37.4%) reported to be reasonably aware of the high level goals, with a further 30.3% reporting to be 'highly aware'. Just over one in five respondents (21.3%) were aware of the Strategic Action Plan, but unaware of the specific goals outlined within it. Approximately one in ten respondents (11%) were unaware the Strategic Action Plan existed until this Review had been undertaken.

Figure 5.2: Level of respondents' awareness of the Breastfeeding Strategic Action Plan goals



The majority of respondents reported that their work was in some way connected to the Strategic Action Plan, with 39.3% of respondents reporting that their work was 'very connected' to the Strategic Action Plan and 41.3% reporting that their work was 'somewhat connected'. Just over one in ten respondents (12%) felt their work had no links with the Strategic Action Plan (Figure 5.3).

Figure 5.3: Extent to which respondents felt their work was connected to the Strategic Action Plan



Perception of progress in promoting, supporting and protecting breastfeeding in Ireland since 2005

Respondents' were invited to present their views in terms of the progress achieved in relation to breastfeeding initiation, duration and exclusivity. Eight out of ten respondents either agreed or strongly agreed that women in Ireland are more likely to try breastfeeding than previously. Over two thirds of respondents agreed or strongly agreed that women are better supported than previously to *try* breastfeeding; with just under 60% reporting that women are better supported than previously to *establish* breastfeeding. The areas in which respondents felt less progress had been made included, exclusive breastfeeding for at least six months; continuation of breastfeeding for at least six months; and support for women to continue breastfeeding for six months.

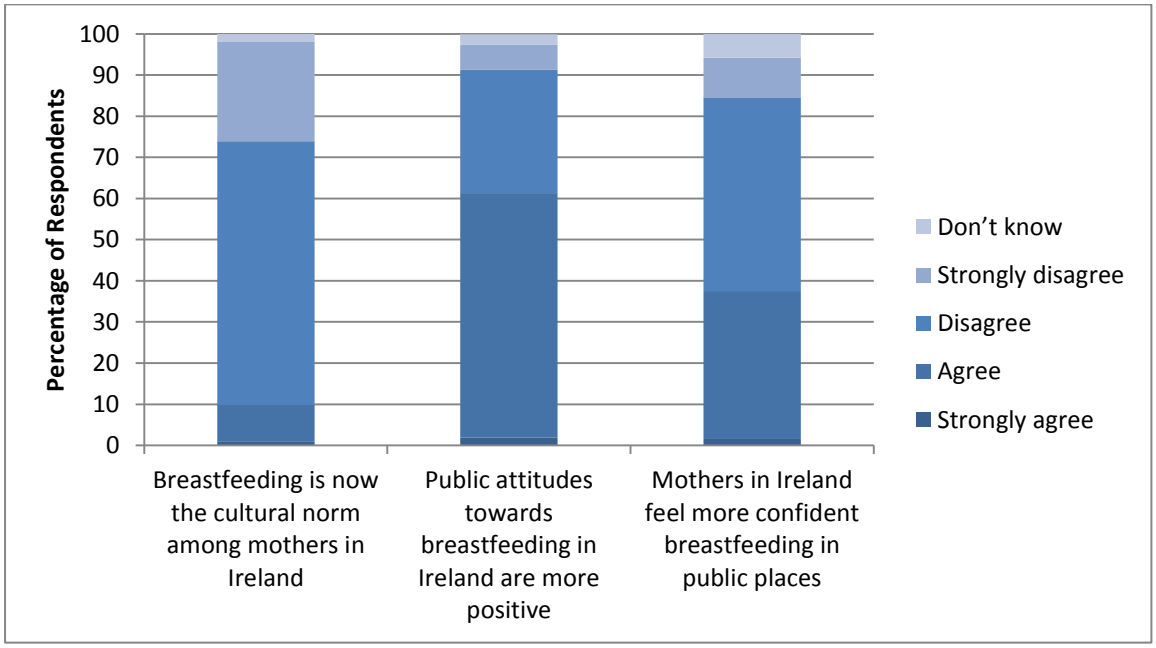
Table 5.3: Perception of progress in relation to breastfeeding initiation, duration and exclusivity since 2005

	Respondents' perception of progress (%)				
	Strongly agree	Agree	Disagree	Strongly disagree	Don't know
Women in Ireland are more likely to try breastfeeding than previously	16	64	18	0.6	1.6
Mothers are more likely to try breastfeed for at least six months	4.2	47.4	35	9.7	3.9
Mothers are more likely to succeed in breastfeeding for at least six months	2.6	22.2	57.4	11	6.8
Mothers are increasingly breastfeeding exclusively for at least six months	1.6	20.3	60	12.1	6
Women are better supported than previously to try breastfeeding	8.7	58.9	21	7.7	3.6
Women are better supported than previously to establish breastfeeding	8.4	50.3	27.4	8.7	5.2
Women are better supported than previously to continue to breastfeed for six months	4.2	38	39	12.2	6.5

The survey sought the views of stakeholders in relation to progress on the development of positive attitudes and normalising breastfeeding in Ireland since 2005. As Figure 5.4 illustrates the majority (88.1%) of respondents feel that breastfeeding is still not the cultural norm among mothers in Ireland. However respondents tended to report a shift in public attitudes to breastfeeding, with 61.3% of key stakeholders reporting that public attitudes to

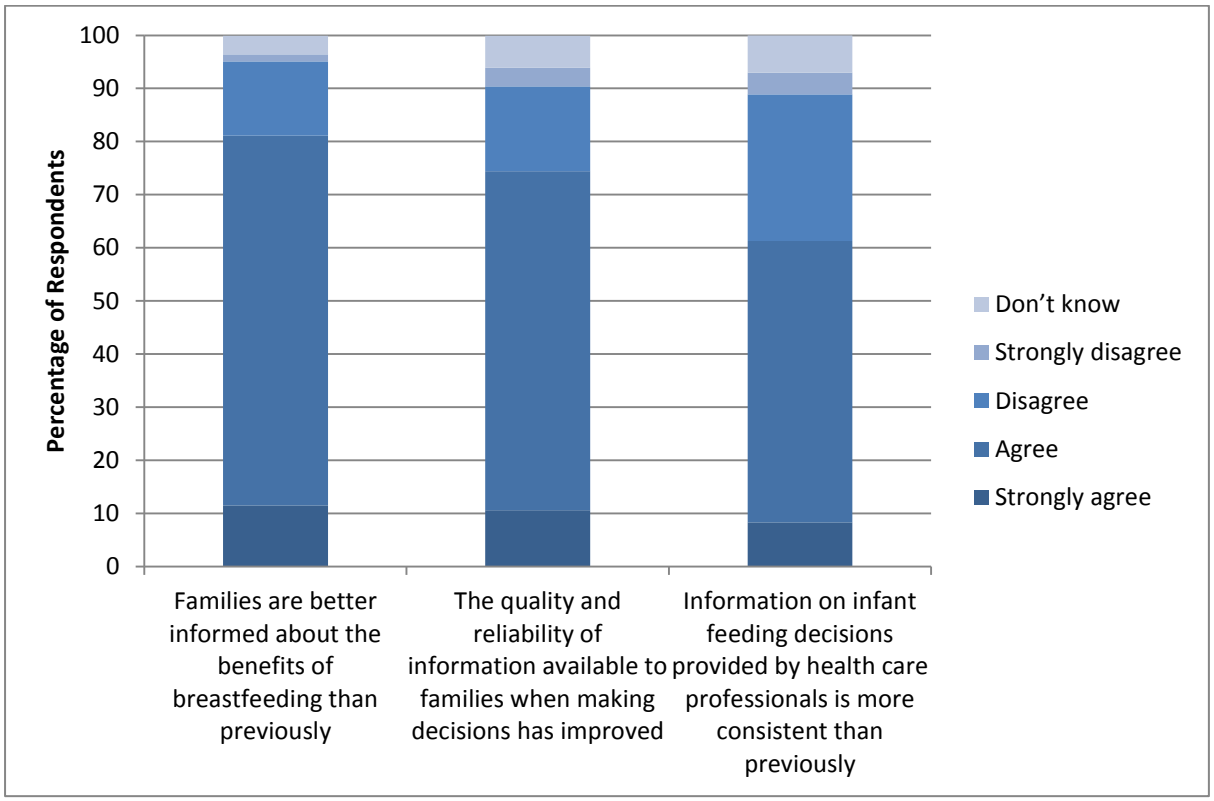
breastfeeding are more positive than before the Strategic Action Plan. However, over half (56.7%) of respondents reported that mothers in Ireland are no more confident about breastfeeding in public places now than in 2005.

Figure 5.4: Perception of progress on the development of positive attitudes and normalising breastfeeding in Ireland since 2005



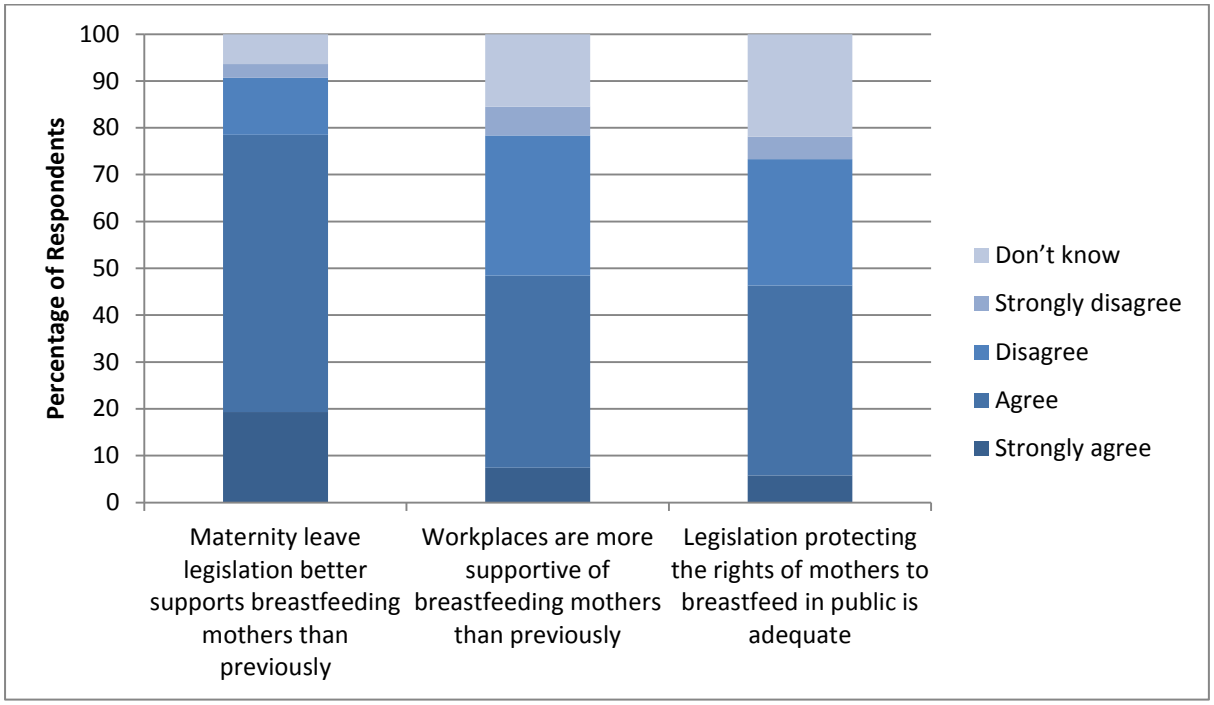
Respondents were asked to indicate the views in relation to progress with the development of appropriate infant feeding information for families in Ireland since 2005; respondents felt good progress was made. The majority (81.1%) of respondents agreed or strongly agreed with the statement that families are better informed about the benefits of breastfeeding than previously. Almost three-quarters of respondents agreed or strongly agreed that the quality and reliability of information available to families when making decisions had improved. From Figure 5.5 it would appear that fewer respondents felt progress had been made on healthcare professionals providing consistent information on infant feeding decisions.

Figure 5.5: Perception of progress with the development of appropriate infant feeding information for families in Ireland since 2005



In terms of the protection of breastfeeding and the rights of breastfeeding mothers, almost eight out of ten respondents either agreed or strongly agreed that maternity leave legislation better supports breastfeeding than previously. Less progress was reported to have been made in relation to workplace support of breastfeeding, with just under half of respondents agreeing with this statement. It would appear there is limited understanding with regard to the adequacy of both workplace supports and legislation to protect breastfeeding in public.

Figure 5.6: Perception of progress with the protection of breastfeeding and the rights of breastfeeding mothers in Ireland since 2005



Respondents were asked to comment on the progress which had been made in terms of achieving each of the Strategic Action Plan high level goals outlined. As Figure 5.7 illustrates, there were mixed responses in relation to the level of progress achieved.

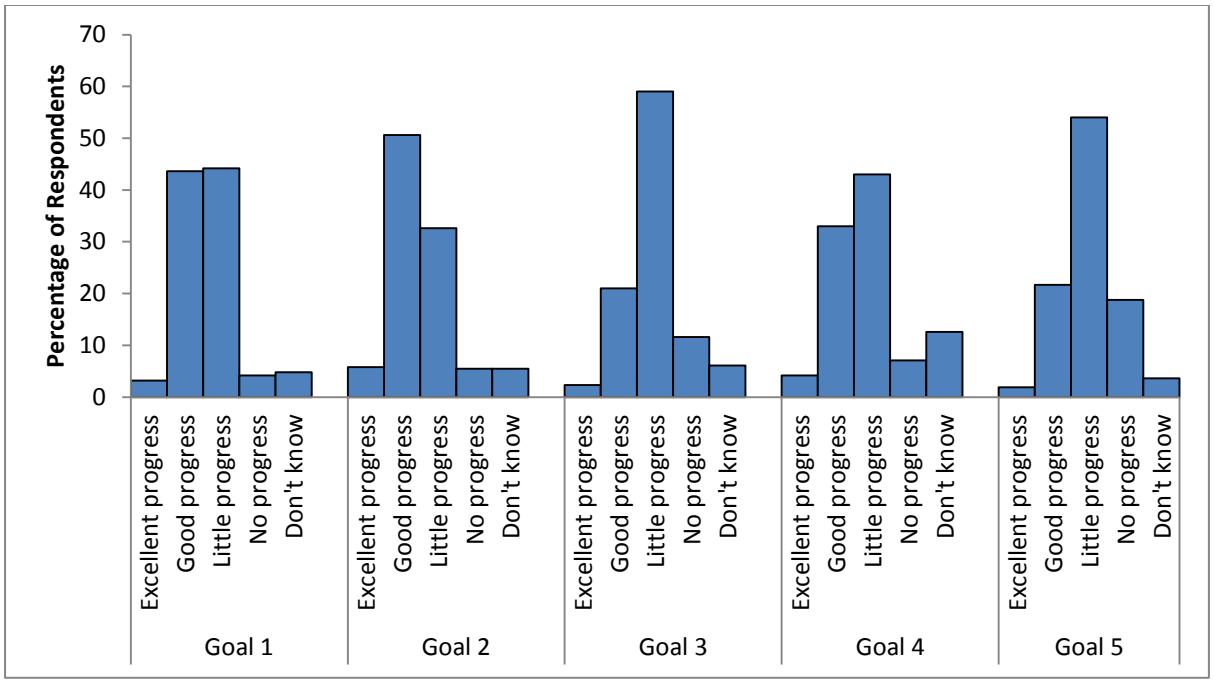
In relation to Goal 1 (*all families have the knowledge, skills and support to make and carry out informed infant feeding decisions*), 43.6% of respondents felt good progress had been made, whilst a further 44.2% reported that little progress had been achieved. Progress against Goal 2 (*the health sector takes responsibilities for developing and implementing evidence-based breastfeeding policies and best practice*) was considered to be better with half of all respondents (50.6%) reporting that progress had been good and just under a third (32.6%) reporting little progress against this goal.

Progress in relation to Goal 3 (*communities support and promote breastfeeding in order to make it normal and preferred choice for families in Ireland*) was considered less successful, with 59% of respondents reporting that little progress had been made in relation to this goal. One in five respondents (21.6%) felt that good progress has been made, whilst more than one in ten (11.6%) reported that no progress had been made against this goal.

Responses in relation to the achievement of Goal 4 (*legislation and public policies promote, support and protect breastfeeding*) showed that one-third of respondents felt that good progress has been made, whilst 43% felt little progress had been achieved. The number of respondents (12.6%) who were unaware of the progress of this goal was higher than for any other goal.

In relation to Goal 5 (*Irish society recognises and facilitates breastfeeding as the optimal method of feeding infants and young children*), just over one in five respondents (21.7%) reported that good progress had been made. Over half of respondents (54%) felt that little progress had been made on achieving this goal, whilst a further 18.8% felt no progress had been made. When the responses for excellent and good progress were collated, it would appear that most progress was made in relation to Goal 2 (56.4%), followed by Goal 1 (46.8%) and then Goal 4 (37.2%). Goals 3 and 5 had similar rates of good to excellent progress (23.3% and 23.6% respectively).

Figure 5.7: Views of respondents on progress with the five goals of the Strategic Action Plan



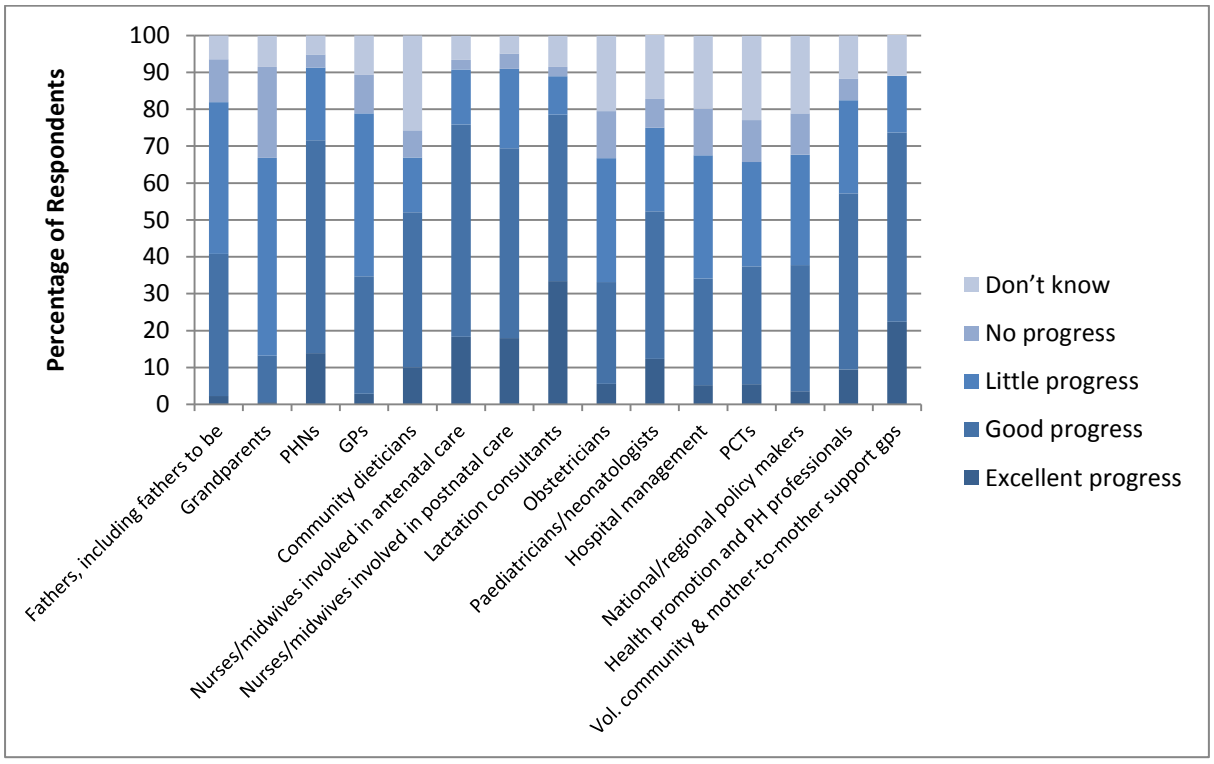
Many groups have a role to play in supporting mothers to consider, try and continue breastfeeding. Respondents were asked to rate the extent of progress in relation to enhancing the skills and effectiveness of a range of groups in supporting breastfeeding in Ireland.

Responses were reviewed in terms of good to excellent progress in relation to skills development and supporting breastfeeding in Ireland. The top five groups which the respondents reported to have made most progress included (Figure 5.8):

- Lactation Consultants
- Nurses/midwives involved in antenatal care
- Voluntary/community and mother-to-be support groups
- Public Health Nurses
- Nurses/midwives involved in postnatal care

In contrast, respondents considered that the little or no progress had been made in enhancing the skills and support for breastfeeding in Ireland among grandparents, fathers, GPs, hospital management or obstetricians.

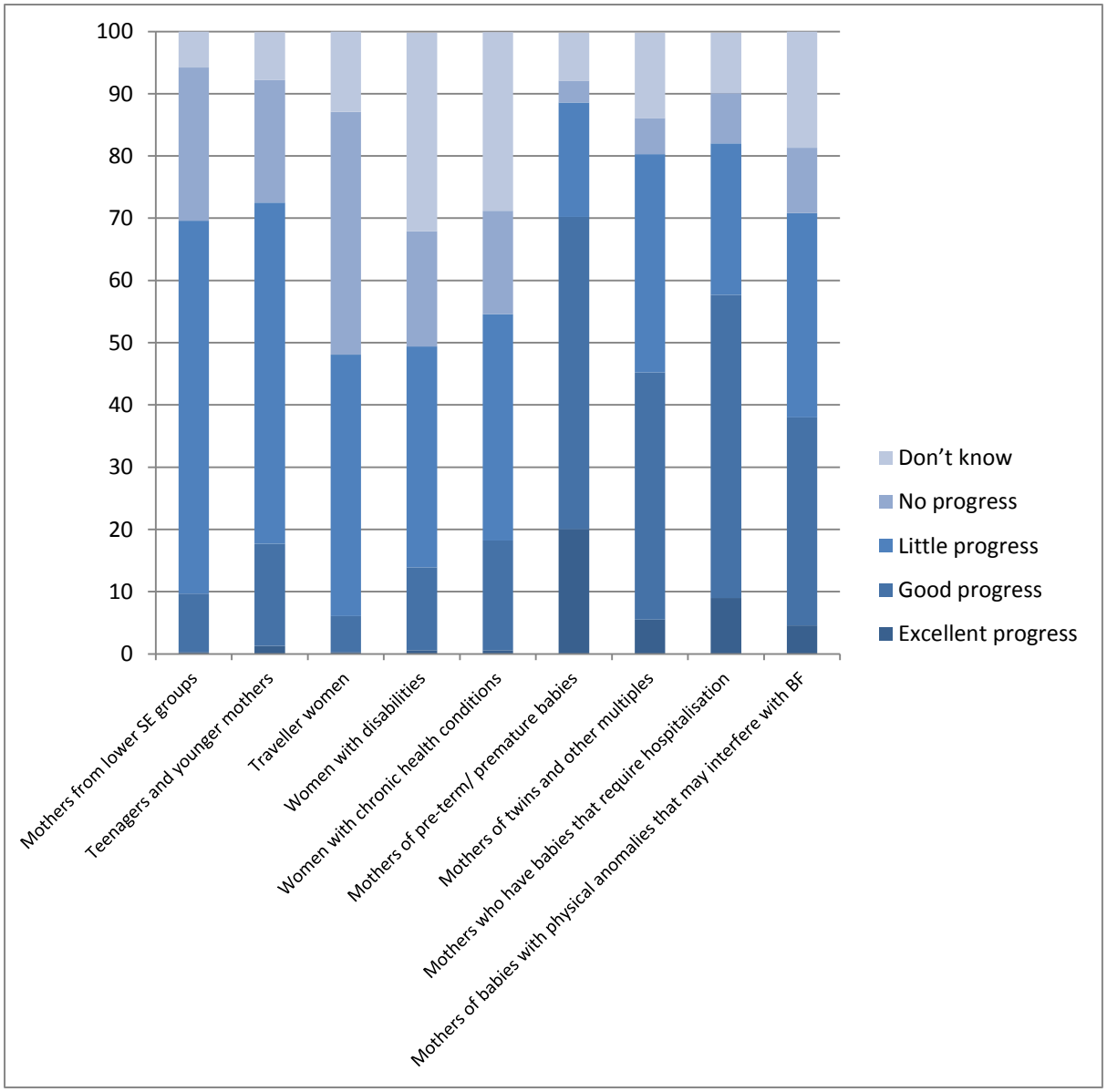
Figure 5.8: Perception of progress made in enhancing the skills and effectiveness of various groups in supporting breastfeeding in Ireland



Addressing diversity in mothers and babies

Breastfeeding patterns in Ireland are determined by a range of socioeconomic, health service and cultural factors. Respondents were asked to rate the level of progress since 2005 made in supporting, promoting and protecting breastfeeding among the groups outlined in Figure 5.9.

Figure 5.9: Perception of progress made in supporting, promoting and protecting breastfeeding among various groups of women



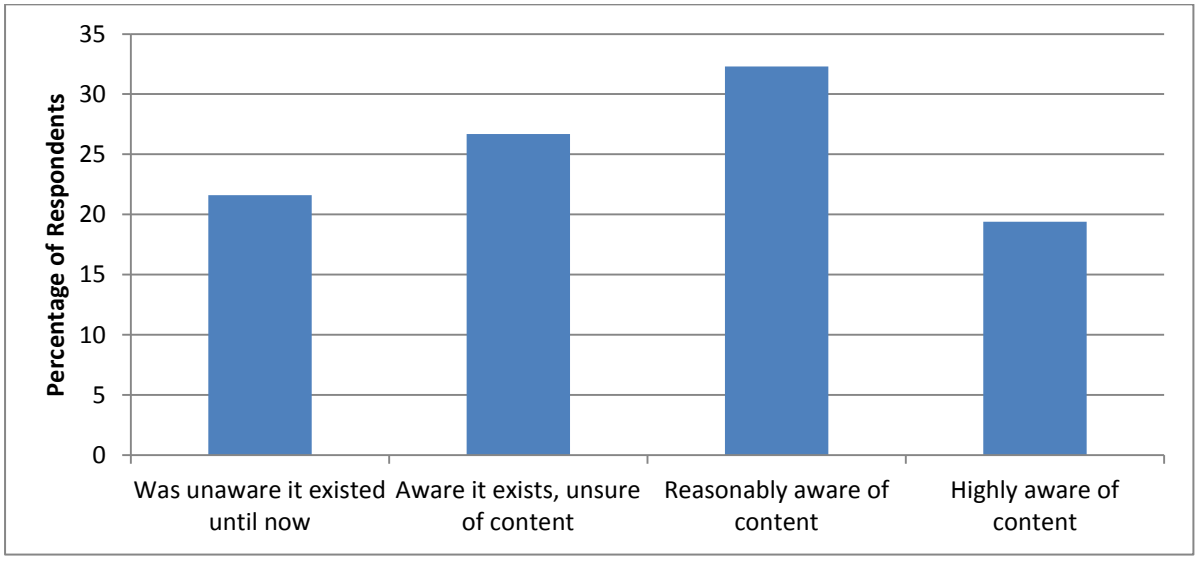
Respondents perceived the greatest progress in supporting, promoting and protecting breastfeeding to have been made among mothers of preterm babies, with 70.2% reporting

good to excellent progress with this group of women. Almost half of respondents (49.6%) felt that good to excellent progress had been made in supporting mothers of babies that require hospitalisation, with just under half (45.2%) reporting good to excellent progress in supporting mothers of twins and multiple births. In contrast, it was perceived that least progress had been made in supporting, promoting and protecting breastfeeding among mothers from lower socioeconomic groups, with 84.5% of respondents describing progress among this group as 'little to no progress'. Other groups for whom it was perceived little or no progress had been made in included Traveller women, teenagers and younger mothers.

Respondent views on progress with breastfeeding support in maternity hospitals

Respondents were asked to rate their level of awareness of the 2012 HSE Infant Feeding Policy for Maternity and Neonatal Units. According to Figure 5.10 over half of all respondents had at least some knowledge of the content of the policy, with 32.3% reporting to be reasonable aware of the content, and a further 19.4% of respondents claiming to be highly aware of the content. Around one in five respondents reported to be unaware that the policy existed; whilst 26.7% were aware the policy existed but were unsure of its content.

Figure 5.10: Awareness of the HSE Infant Feeding Policy for Maternity and Neonatal Units, 2012



Respondents were asked to give their views on the current level of compliance with the HSE Infant Feeding Policy for Maternity and Neonatal Units. The majority of respondents (30.5%)

were unable to comment on the current level of compliance; 27.3% of respondents felt that there was good but not full compliance, and 26.6% reporting that they felt compliance was reasonable. Approximately one in ten respondents felt there was little compliance with the policy, while only 4.2% reported full compliance with the policy. (See Figure 5.11).

Figure 5.11: Perception of the current level of compliance with the HSE Infant Feeding Policy for Maternity and Neonatal Units

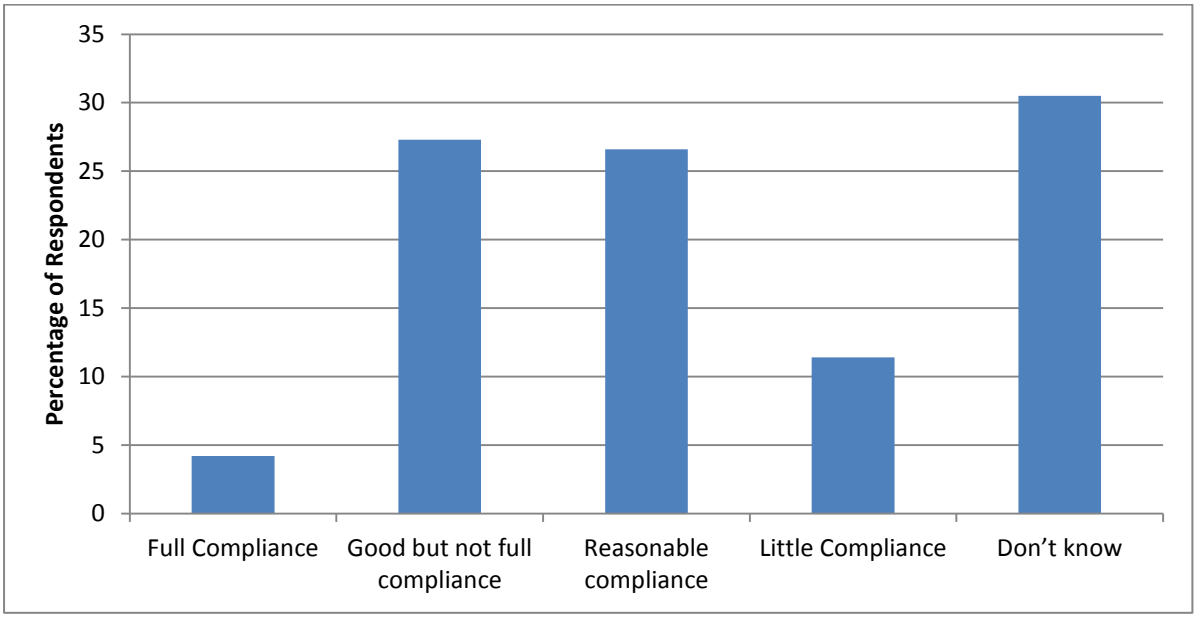
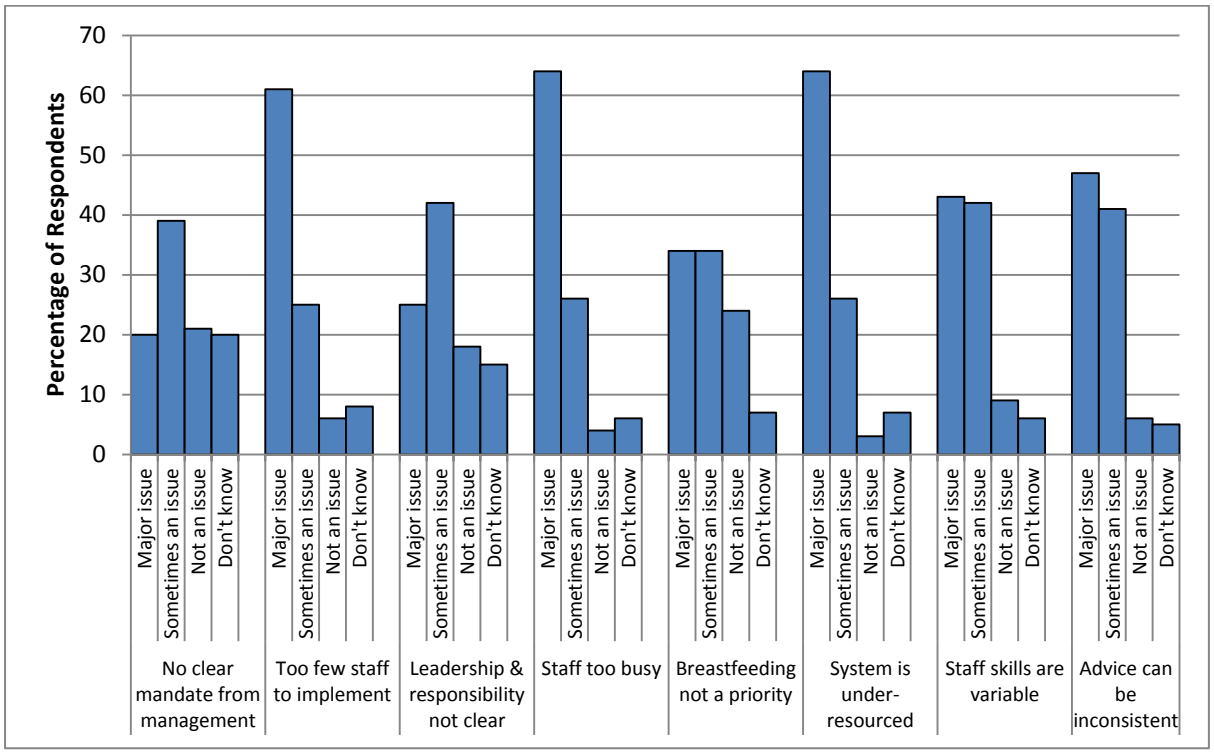


Figure 5.12 outlines respondent views on potential barriers to implementing evidence-based practice supporting breastfeeding in the maternity hospital setting. Respondents rated the potential barriers in terms of the extent to which they were considered an issue in supporting breastfeeding. The major issues identified as potential barriers included; too few staff being too busy and the system being under-resourced. Other major issues included inconsistent advice and variability of staff skills.

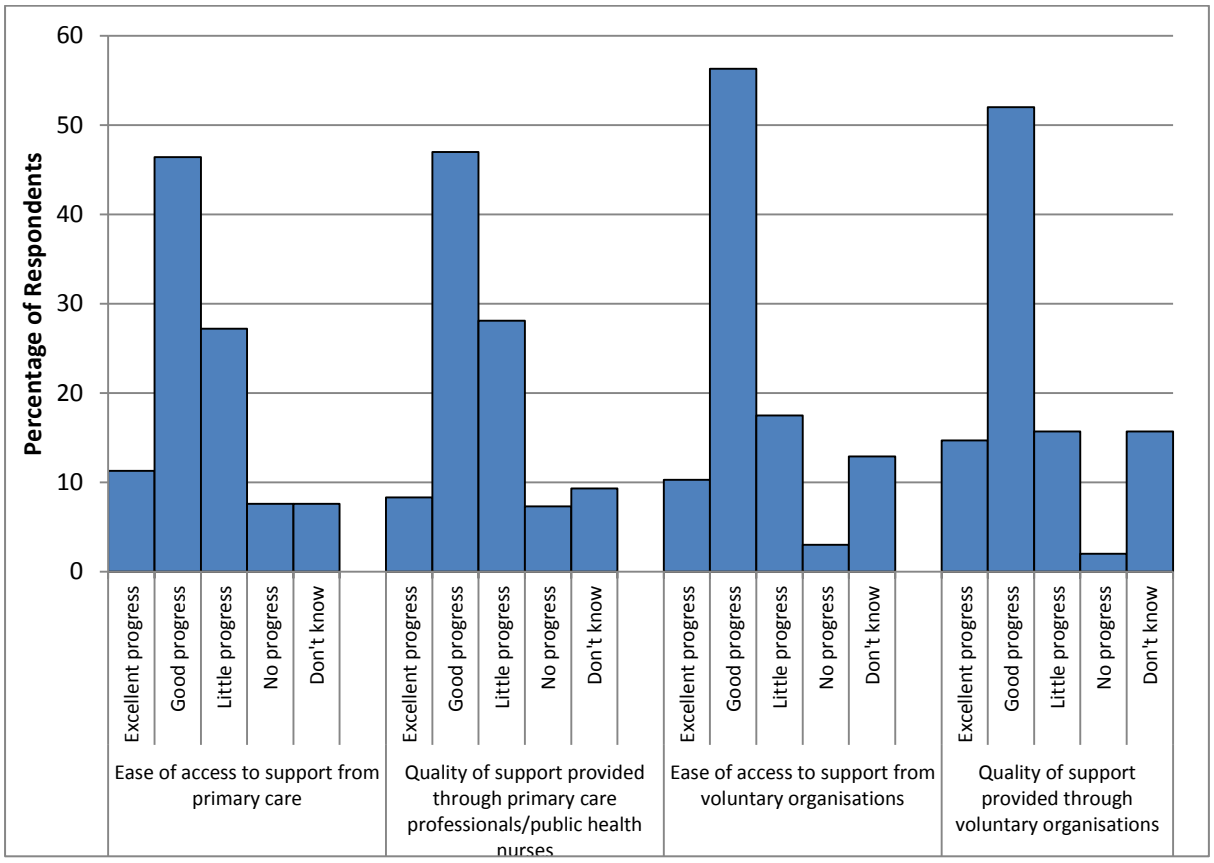
Figure 5.12: Perception of potential barriers to implementing evidence-based practice supporting breastfeeding in the maternity hospital setting



Breastfeeding in the community setting

In the community, support for breastfeeding is provided through a range of statutory and non-statutory services. Respondents were asked to indicate their views on progress with community supports for breastfeeding mothers since 2005 (Figure 5.13). There was a perception of significant developments in the support from voluntary organisations with two-thirds of respondents rating ease of access to and quality of support provided through voluntary organisations as good to excellent. In contrast, approximately one-third of respondents felt that good or little progress had been made in relation to the support provided in the community in terms of ease of access to support from primary care and quality of support provided through primary care professional/PHNs.

Figure 5.13: Perception of progress with community supports for breastfeeding mothers since 2005



Developments in data and research on breastfeeding in Ireland

Respondents were asked to rate the current adequacy of breastfeeding evidence in Ireland. Of the data sources listed in Table 5.4, over 70% reported that the current adequacy of research on the benefits of breastfeeding was good to excellent. Almost two-thirds (65.4%) of respondents felt that the adequacy of basic data on patterns of breastfeeding initiation was good to excellent, although data patterns of breastfeeding duration was not rated as highly.

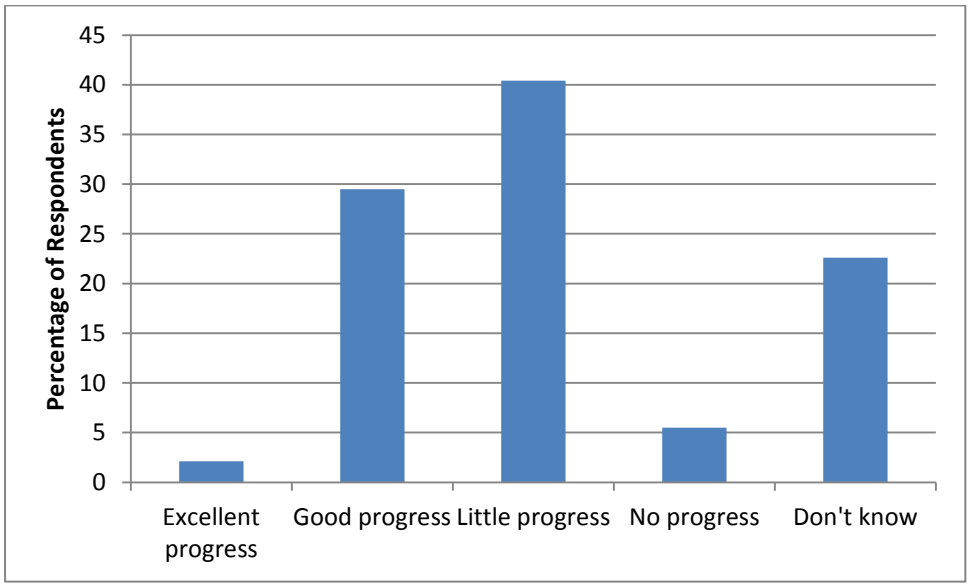
The reported gaps/inadequacy of breastfeeding data was most apparent in terms of research on the behaviours of breastfeeding advice and support. Furthermore, over half of respondents reported that the adequacy of research into the translation of policy into practice in maternity hospitals, and research on the impacts of marketing of breast milk substitutes on mothers in Ireland, is either poor or absent. Almost 40% of respondents felt that there were inadequate audits of breastfeeding support services, whilst a further 11% felt these were absent.

Table 5.4: Adequacy of breastfeeding evidence in Ireland

Breastfeeding evidence in Ireland	Adequacy of Breastfeeding Evidence (% respondents)				
	Excellent	Good	Poor	Absent	Don't know
Basic data on patterns of breastfeeding initiation	6.8	58.6	20.9	1.0	12.7
Basic data on patterns of breastfeeding duration	3.1	38.1	39.2	5.2	14.4
Research on the benefits of breastfeeding	22.0	49.5	17.2	1.0	10.3
Research on the decision making processes of pregnant women and mothers around infant feeding	2.4	32.2	40.8	4.8	19.8
Research on the enablers and barriers to continued breastfeeding in the community	2.1	32.6	41.2	5.5	18.6
Research on the translation of policy into practice in maternity hospitals	1.4	18	45.8	7.6	27.2
Research on the behaviours of health professionals in breastfeeding advice and support	0.7	18.3	46.5	10	24.5
Audits of breastfeeding support services	3.5	20	39.8	11.1	25.6
Research on the impacts of marketing of breast milk substitutes on mothers in Ireland	2.1	20.7	36.	16.2	24.1

Respondents were asked to comment on the progress made in the development of health information systems relating to breastfeeding in Ireland since 2005 (Figure 5.14). In the main, 40.4% of respondents felt that little progress had been made and over a fifth (22.6%) of respondents did not know the extent of progress in relation to health information systems.

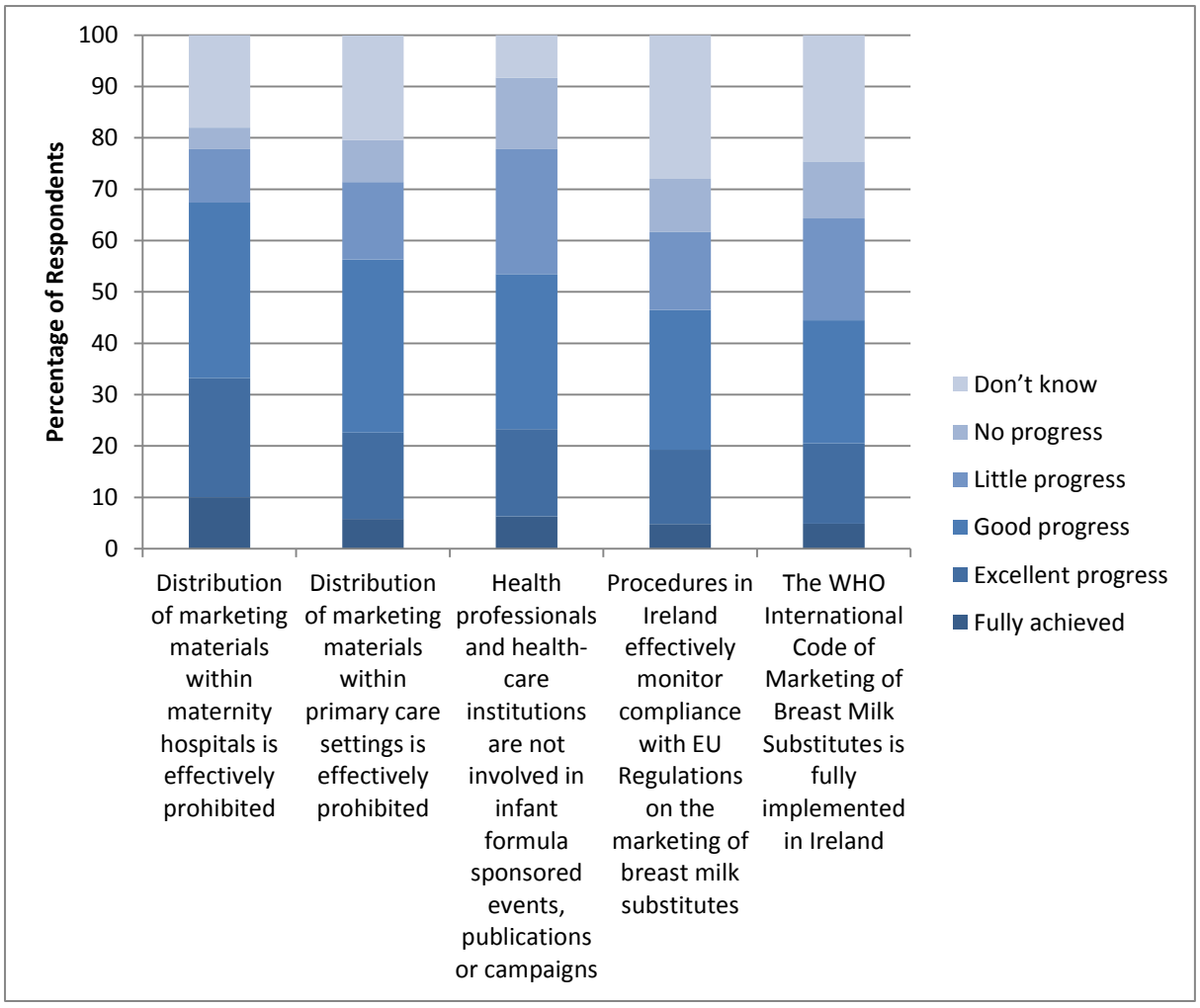
Figure 5.14: Perception of progress made in relation to the development of health information systems relating to breastfeeding in Ireland since 2005



Protecting breastfeeding from commercial interests

The Strategic Action Plan aimed to better protect breastfeeding by addressing potentially inappropriate marketing of breast milk substitutes (infant formula) and allied products. Respondents were asked to indicate the extent to which they felt progress had been made in this domain. Circa 10% of respondents indicated that the Code had been fully implemented in Ireland. Respondents indicated that greatest progress had been made in relation to the prohibiting the distribution of marketing materials within maternity hospitals. Least progress was reported to have been in relation to the involvement of healthcare professionals and institutions in formula sponsored events, publications or campaigns, with 38.2% of respondents reporting that little or no progress had been made. (See Figure 5.15).

Figure 5.15: Perception of progress made in relation to the protection of breastfeeding by addressing potentially inappropriate marketing of breast milk substitutes (infant formula) and allied products



5.5 Priorities for future strategy

Interviewees and stakeholders were asked to identify issues they felt should be afforded greater emphasis within any future breastfeeding strategy/policy in Ireland. While a comprehensive and varied range of suggestions were obtained, there was no overall consensus on the issues which should be afforded greater attention within any future strategy/policy. The most frequently identified issues are outlined in this section.

Education

One of the key issues highlighted was the need for breastfeeding education for both girls and boys across the education spectrum from pre-school through to third level education. It was noted that breastfeeding education delivered through the statutory curriculum using appropriate teaching materials and schools texts which illustrate women breastfeeding as opposed to bottle feeding would be appropriate. It was suggested that breastfeeding education should include teaching children and young people the value, normality and life-long importance of breastfeeding. There were calls for breastfeeding coordinators to train/educate school staff in the delivery of breastfeeding education. In the context of early education, it was also suggested that there is a need to educate young women about breastfeeding. Beyond the school setting, it was noted that there is a need for greater breastfeeding education for Irish society as a whole.

Information and messaging

Information and messaging were considered important aspects of promoting breastfeeding; using positive language and depicting breastfeeding as the normal way to feed a baby. As part of the approach to raise the profile and image of breastfeeding, suggestions were presented in relation to the use of positive role models, particularly for younger women. Considerable attention was given to the need for public awareness campaigns, using a variety of media and making information available in prominent public places. Furthermore public awareness campaigns were identified as a possible approach to help improve breastfeeding rates, particularly among lower socioeconomic groups.

In terms of the messaging around breastfeeding, there were calls for greater balance in terms of the promotion of breastfeeding to avoid loading expectation upon mothers and better

approaches to addressing mothers who are unsuccessful in achieving their infant feeding goals for whatever reason. It was suggested that the messaging around breastfeeding should continue to be more practical, focussing on encouraging mothers, and providing advice. In terms of information and support from healthcare professionals, it was noted that this could be further developed in primary care, coupled with increasing awareness of the role and support available from lactation consultants. However, this can only be achieved where the support from lactation consultants is available in both the maternity hospital/unit and community setting.

Certain stakeholders considered that messaging should highlight the risks associated with formula feeding. There was a sense among interviewees that until there is a shift in the emphasis of the message and the evidence pertaining to risks of formula feeding is clearly presented, effecting change in breastfeeding rates is unlikely.

One of the most notable issues arising in relation to information and messaging was the need for healthcare professionals to provide consistent and accurate advice and information. This could be facilitated through the development of guidelines and education for all healthcare staff to ensure consistent advice and information is delivered to all women.

Staffing

Staffing levels in maternity hospitals/units and the community setting featured as areas for focus in any future strategy/policy. Specific issues in relation to staffing included the need for increased staff time to support women and babies as they establish breastfeeding. There were calls for more midwives on postnatal wards, as well as additional specialist support from lactation consultants in both the hospital and community. Much value is placed on support in the community to maintain breastfeeding; in this context the need for more primary care staff to support breastfeeding mothers was considered a priority. At a strategic level, it was noted that a national team to support the National Breastfeeding Coordinator should be a priority in any future strategy/policy.

Family Support

Family support for women featured heavily in the interview and online responses to questioning on future policy priorities. Many interviewees commented on the need for

practical alterations to service design and delivery to focus on fathers/partners. The need to involve fathers/partners at the antenatal stage was considered important in decisions around infant feeding. Against a background of many years of formula feeding, there is particular need to educate grandmothers in their role in supporting their daughters to breastfeed.

Workplace

In terms of protecting breastfeeding in the workplace, it was proposed that gaps still exist in relation to provision of facilities and further development in this area is required if breastfeeding is to be supported and protected. It was noted that all workplaces should provide appropriate facilities and protected time/reduced hours to enable women to continue breastfeeding upon return to work. There were calls for the existing legislation to be extended to protect breastfeeding mothers in the workplace beyond six months.

BFHI

There was recognition of the increased involvement of all maternity hospitals/units in the BFHI. However, there were calls for the Baby Friendly standards and framework to be mandatory in all maternity hospitals/unit. It was proposed that Baby Friendly should be included in the service plan of all hospitals and should be considered a priority at both a national and local level.

Data

The limitations pertaining to data collection and health information systems are already well documented in previous chapters. It was noted by interviewees that any future strategy/policy should have a requirement for standardised methods of data collection, including an effective health information system.

Lactation Consultants

The role and value of lactation consultants was rated highly by interviewees and respondents to the survey. It was considered that the allocation of adequate, publicly available lactation consultants should form a core component of maternity service and primary care commissioning decisions. It was also noted that lactation consultants should be available 24 hours/day. There were calls for the role and expertise of lactation consultants to be

acknowledged and promoted. There was also a suggestion that any future role of lactation consultants should include auditing and monitoring breastfeeding practice.

Community Support

A central concern of stakeholders was the level of available support for women breastfeeding in the days following birth. There were suggestions to develop an early days package, proving mothers with practical support in the first three weeks following birth of their baby. There were specific calls for support from PHNs, with visits 7-10 days postpartum.

There were many calls for greater attention to be given to increasing and improving the support for breastfeeding mothers in the community from both statutory and voluntary agencies. The need for specific support in the early days immediately following birth was considered a priority, with support available from lactation consultants 24 hours/day. It was also suggested that support from midwives should continue 10-15 days postpartum. In terms of statutory service provision, key stakeholders reported that greater support is needed from healthcare professionals in primary care. PHN caseload needs to reflect the child population and earlier discharge from hospital. In addition, there were suggestions for the establishment of local clinics by PHNs/midwives/lactation consultants.

There was broad agreement about the need to increase time and resources to facilitate the level of support needed in the community, as well as providing structured community support including community midwifery services. This could perhaps be achieved through the development and implementation of community support guidelines which featured as part of the identified future priorities.

Training

The need for staff training on breastfeeding across the spectrum of nursing and medical professionals was considered a priority for any future breastfeeding strategy/policy in Ireland. Key stakeholders identified all students (in particular student midwives), PHNs, GPs, Non-Consultant Hospital Doctors (NCHDs), dieticians and peer support workers as being among those to whom specific training on breastfeeding should be delivered. At the outset, it was noted that there is a gap in terms of breastfeeding training, and that the necessary funding must be allocated to facilitate staff requirements.

Some specific aspects of training were noted; training for all nurses to help mothers initiate breastfeeding and training for healthcare professionals working in disadvantaged areas. In relation to specialist expertise, there were calls for appropriately trained lactation consultants, by enabling and facilitating nurses/midwives to undertake the International Board Certified Lactation Consultant (IBCLC) qualification.

Antenatal care and education

The value and importance of antenatal care and breastfeeding education featured heavily in the priorities for future action. There should be realistic preparation and normalisation of breastfeeding in the antenatal period, with more antenatal breastfeeding education including both parents. There were many suggestions about antenatal breastfeeding education including; the establishment of antenatal breastfeeding support groups, encouraging antenatal women to attend existing breastfeeding groups, further promotion of breastfeeding in the antenatal classes in the maternity hospitals/units and in the community setting, and enhanced antenatal support for women from lower socioeconomic groups. Particular attention was given to antenatal education in the community; with calls to develop the role of PHNs in antenatal breastfeeding education and development of breastfeeding education in primary care. It was also suggested that the provision of compulsory antenatal lactation support should be considered within any future breastfeeding strategy.

Managing commercial interests

The overwhelming response in terms of commercial interests centred on calls for the cessation of free formula milk in maternity hospitals/units. Measures that were suggested included; limiting ease of availability of formula milk, reducing the visibility of formula in hospitals, introducing a cost for formula milk in hospitals.

One area of concern which emerged during the interviews was the sponsorship of events and publications by infant formula companies. In response to this, it was noted that changing practice with regard to corporate sponsorship of healthcare professional events was a priority area and that this could be supported by the development of practice guidelines from professional associations and societies. It was also suggested that company representatives should not attend primary care or maternity service clinics without a pre-arranged

appointment. There was a strong sense among key stakeholders that all healthcare professionals need to be working towards full implementation of the Code, but further awareness-raising around the content and interpretation of the Code is needed.

The advertising of infant formula milks and follow-on milks continues to be area of concern and respondents felt it required immediate attention. Some respondents wanted an outright ban on the overt advertising of infant and follow-on formula supported by the relevant legislation. In response to the growing follow-on milk market, there were calls for the Code to include these products.

Culture

Cultural/societal barriers remain one of the biggest challenges facing those working in the area of breastfeeding and in which most work is needed to improve breastfeeding rates. It was noted that societal attitudes need to change; breastfeeding needs to become culturally more acceptable, publicly visible and viewed as the normal way in which to feed a baby.

Inequalities

The need to improve breastfeeding rates among those least likely to breastfeed was a goal of the Strategic Action Plan. It was reported through the interviews and online consultation that this remains a challenges for those working to promote breastfeeding in socially disadvantaged areas and who support women from lower socioeconomic groups. There were calls for more targeted support, better education and facilitation. Some suggested that incentives should be considered as part of an approach to improve breastfeeding rates among lower socioeconomic groups. However, the use of incentives can be controversial.

Other priority areas

In addition to the priority areas outlined above, other suggestions were made which should be considered in any future breastfeeding strategy/policy. Of note these related to

- Enhanced clarity and practice with regard to breastfeeding support where there are medical/surgical concerns including tongue-tie, hypoglycaemia or serious illness in the infant and where there are issues such as obesity, mental illness or medication use for the mother

- Integration of breastfeeding provisions into care plans in maternity and paediatric hospitals
- Enhancement of practice regarding breastfeeding support in the context of practice on the weighing of babies and subsequent referrals for inadequate weight gain
- Development of shared learning networks particularly for practitioners who may working in isolated/rural areas
- Provision of breast pumps
- Expansion of opportunities for home birthing
- Development of a targeted approach for Traveller women

5.6 Key points

Achievements and deficits in implementation

- Assessment of progress with the actions of the Strategic Action Plan was challenging as there was no pre-defined monitoring framework and few measurable indicators of progress. There was very little documentary evidence of what constituted routine practice at the start and end of the Strategic Action Plan term.

- The most significant achievements of implementation relate to (i) the development of standardised policy to guide consistent service development and monitoring within HSE maternity services (ii) enhancements in training for nurses and midwives (iii) the expansion of appropriately trained community-led peer support programmes (iv) the development of more appropriate media messages to promote breastfeeding (v) the development of more consistent and readily available information including the www.breastfeeding.ie website.

- The most significant deficits in implementation relate to (i) the cascade of national policy to the 'coalface' due in part to not appointing regional coordinators (ii) the development of fit for purpose data collection systems relating to breastfeeding duration and evaluation/audits of practice (iii) making any significant impact on infant feeding cultures among Irish women and addressing inequalities (iv) under developed practice in engaging with fathers/grandmothers within breastfeeding support approaches (v) securing engagement with implementation within key departmental and public health leadership contexts and within clinical specialties.

- Of the five high level goals, stakeholders reported that most progress had been made in relation to Goal 2, followed by Goal 1, and then Goal 4. It was reported that least progress had been made in terms of achieving Goal 5.

- Concerns were expressed about the governmental priority afforded to breastfeeding and the appropriateness of assigning the function solely to the HSE in light of the nature of cross-sectoral working required to affect change.

- Implementation was driven by considerable voluntary effort working with constrained budgets. Fostering engagement to progress Strategic Action Plan within many sectors and at many levels was challenging and this limited the scope of what was achieved.

- At maternity service level pressures relating to staff time and availability were perceived as a major impediment to enhancing practice in breastfeeding support.

- Stakeholders considered that while public attitudes had improved somewhat, breastfeeding is still not the cultural norm in Ireland.

- Stakeholders expressed concerns that mothers in Ireland from ethnic/cultural groups where breastfeeding is the norm were at risk of having their breastfeeding culture eroded over time.

- Stakeholders considered that progress with addressing inequalities in breastfeeding was minimal, particularly with regard to women in the Travelling community and lower socioeconomic groups. However, progress with breastfeeding support for preterm and medically vulnerable infants was noted by stakeholders.

- Stakeholders perceived little progress with supporting fathers/partners and grandparents as part of social breastfeeding support networks for new mothers.

- Managing commercial interest remains a significant issue with concerns over practice relating to advertising, sponsorship and the availability of free formula milk. Progress appeared to have been made in relation to restricting the distribution of marketing materials within maternity hospitals.

- Over half of all stakeholders surveyed were aware of the HSE Infant Feeding Policy for Maternity and Neonatal Units, with a similar number reporting that compliance with the policy was reasonable to good.

- In the community, support for breastfeeding is provided by a range of statutory and voluntary services. Ease of access to, and quality of support from voluntary organisations was rated highly by stakeholders in the survey.

Future priorities

- A wide range of future priorities were identified by stakeholders as requiring greater attention within any future breastfeeding strategy/policy. The main issues included: messaging, training, community support, staffing, antenatal care and education, managing commercial interests and breastfeeding education in schools.

- Stakeholders provided additional comments on a number of topic areas. Some of the main themes emerging included service provision, staff training, data and research, messaging for mothers, leadership, inequalities, culture, policy (direction, support and implementation gap) and managing commercial interests.

Chapter 6. Literature review

6.1 Introduction

Renfrew et al (2012) note that not breastfeeding is both a cause and a consequence of social inequalities since babies not breastfed are more likely to develop ill-health, and breastfeeding is more prevalent among higher socioeconomic groups in the 'developed' world. Renfrew et al (2012) estimated that over £17 million could be gained annually by avoiding the costs of treating four acute diseases in infants for which breastfeeding can act as a preventive measure (gastrointestinal infection-related hospital admissions, respiratory tract infections, otitis media). This could be achieved by increasing rates to 45% of women exclusively breastfeeding for four months, and if 75% of babies in neonatal units were breastfed at discharge.

In this context it is notable that in the Republic of Ireland, the rates of infant gastroenteritis are very high; 2,262 per 1000 person years, or an average of 2.3 episodes per year (Safefood, 2007:25).

Renfrew et al (2012) also estimated that if half of mothers not breastfeeding were to breastfeed for up to 18 months of their lifetime (annual cohort of 313,000 first time mothers) there would be 865 fewer breast cancer cases with an incremental benefit of more than £31 million over the lifetime of each annual cohort of first-time mothers. Based on three health problems (respiratory infections, otitis media, gastroenteritis), work in the US estimates that for every 1000 infants who were never breastfeed compared to 1000 infants who were exclusively breastfed for three months, there were 2,033 more physician visits, 212 more days of hospitalisation, and 609 more prescriptions (cited in British Columbia Ministry of Health et al, 2012).

There are three key outcomes to consider within breastfeeding policy and interventions: initiation, duration, exclusivity. Breastfeeding promotion focuses on encouraging women to consider breastfeeding as their infant feeding decision. Breastfeeding support relates to assisting women to initiate and continue breastfeeding, and maintaining exclusive breastfeeding for six months. Breastfeeding protection relates to protecting the rights of

women to breastfeed and ensuring that women's infant feeding decisions are based on appropriate information on risks and benefits and as free as possible from commercial interests. Labbok et al (2008) argue that breastfeeding should be positioned in terms of women's rights rather than in free market discourse as a 'choice' or 'option'; while Hausman (2008) concurs that formula marketing has taken the concept of 'choice' and positioned it in terms of consumerism rather than rights. The increased awareness of the importance of breastfeeding for health, and the considerable marketing efforts of breast milk substitutes, has led to a worldwide response by policymakers to support breastfeeding as a highly effective public health intervention (Geddes, 2013).

In preparing the evidence for *Breastfeeding in Ireland: A Five Year Strategic Action Plan* (2005), Nic Gabhainn and Batt compiled an excellent synopsis of the importance of breastfeeding and this evidence is not repeated here.[19] Instead, this chapter examines what influences infant feeding decisions as evidenced by international and Irish studies. Methods to alleviate breastfeeding difficulties, support and protect women to exclusively breastfeed for six months will also be discussed. In addition, a focus on pre-term infants has been included.

6.2 Methods

A rapid narrative review was undertaken focussing on key grey literature, identifying systematic reviews, and principally focussing on two journals with supplementary literature derived from other journals. The search period was limited to January 2005 to August 2013[20] to avoid duplication with any work already considered by Nic Gabhainn and Batt (DoHC, 2005). The grey literature principally came from the US, the UK or Australia. Systematic reviews formed part of some of this grey literature; commissioned research to inform breastfeeding policies at regional or national level. Systematic reviews were also identified in the Cochrane database, and within the overall literature search in two principal journals. The *Journal of Human Lactation* and the *International Breastfeeding Journal* were searched by hand for the period 2005-August 2013; this search process was repeated to ensure that no

[19] For more recent overviews of the evidence see Ip et al (2007) and Begley et al (2008). With regard to food allergy and breastfeeding, see Grimshaw et al (2009).
[20] A small number of supplementary articles have been included that directly relate to data from Ireland and were published after this date.

articles were overlooked. The HSE health repository, Lenus, was also searched with nine relevant articles found. In 2008, the HSE Population Health (Health Promotion) Directorate commissioned the Health Promotion Research Centre in the National University of Ireland, Galway to produce a breastfeeding bibliography. This bibliography includes published and unpublished studies relating to infant feeding in Ireland. This bibliography is hosted on the www.breastfeeding.ie website and literature published from 2005 (inclusive) onwards was considered for inclusion in this review.[21] Many of the links on this site are no longer active and a small number of unpublished works were not accessible. However, all research deemed relevant and that was accessible has been included. The focus of all literature searching was for information relating to determinants and factors that encouraged/discouraged breastfeeding, and interventions to improve breastfeeding initiation, duration and exclusivity.

Many articles were identified that were highly specific and specialised, and these were set aside as being outside the remit of this Review. These articles included topics such as: breastfeeding and substance misuse, breastfeeding with cancer/diabetes/HIV, the sexually abused mother, women with breast malformations. Although these are highly relevant and important areas, and women in these situations may also experience other health inequities and therefore require particular focus to support them and their children, analysis of this literature would require a series of separate literature reviews to adequately address these issues. However a decision was taken to include a selection of information on breastfeeding preterm infants. The rationale for this was that preterm birth is a reasonably common occurrence; many of the initiatives in this area are an extension of the BFHI to the Neonatal Intensive Care Unit (NICU); and preterm babies are often born to women who are experiencing other health inequalities and breastfeeding of these babies is particularly important. In addition, many of the initiatives intersect or have the potential to intersect, with mainstream practices for example the use of milk banks, or helping women who had caesarean sections or otherwise difficult labours to breastfeed. Much of the included literature on breastfeeding preterm infants was found in the two main journal searches however a selection from the *Journal of Neonatal Nursing* is also included. Literature that focuses solely

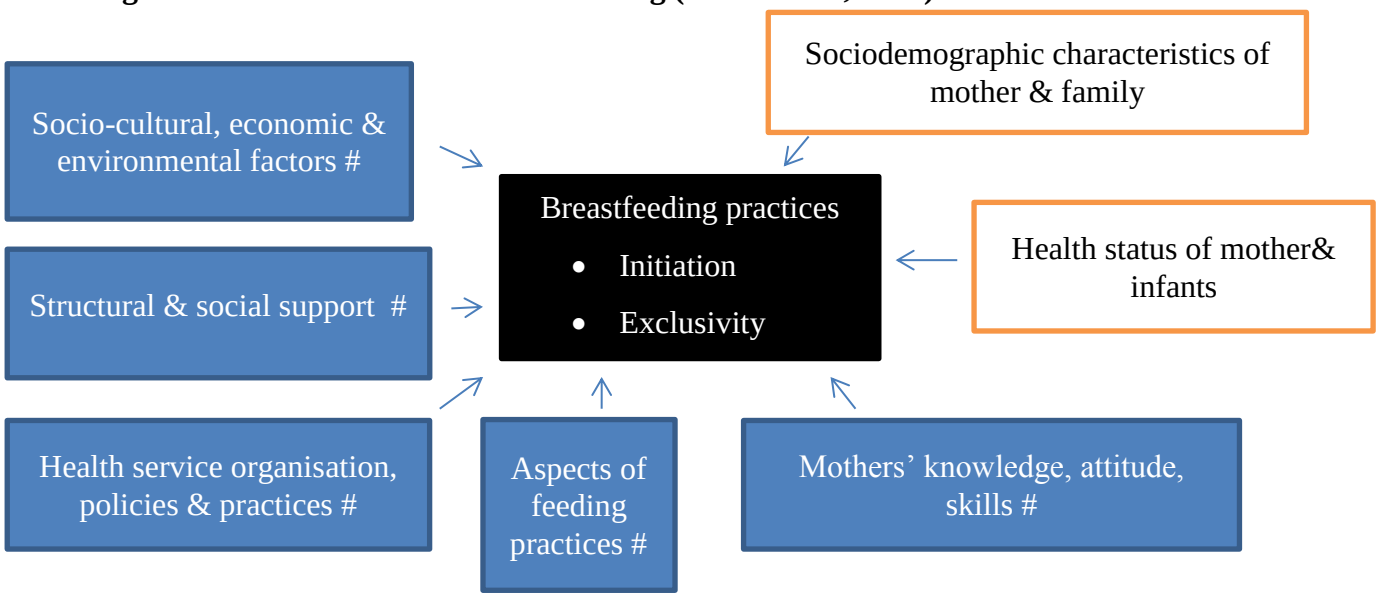
[21] Literature across the nine sections was considered for inclusion: book/book chapter, conference proceedings/abstracts, government report, non-government report, health services report, international organisation, non-peer reviewed journal article, peer reviewed journal article, research units/academic departments.

on the importance of breastfeeding was not included as this was not the objective of this Review.

6.3 Determinants of breastfeeding: The international evidence

The determinants for breastfeeding initiation and duration occur in several domains; the social and cultural context, the attitude of families, peers and partners, and the woman's own self-efficacy and breastfeeding intent. Alongside these determinants, there are also enablers/barriers such as difficult births, hospital practices, education and information, nipple trauma and breast problems (e.g. mastitis, engorgement), latch/suckling problems and the need to return to work. These determinants and enablers/barriers also intersect for example, women may be incorrectly advised to stop breastfeeding when they have mastitis (Scott et al, 2008; Amir and Ingram, 2008) – therefore the mother's health status and knowledge may interact with the barrier to breastfeeding of incorrect or inconsistent professional advice. Hector et al (2004)[22] usefully chart the determinants of breastfeeding in terms of those which are amenable to intervention.

Figure 6.1: Determinants of breastfeeding (Hector et al, 2004)



Amenable to intervention

[22] Although outside the timeline of this review, this 2004 publication was included given its relevance and as it was not previously used by Nic Gabhainn and Batt (DoHC, 2005).

The sociodemographic characteristics of the mother and family cannot be altered by breastfeeding interventions, but the attitude and exposure to breastfeeding by people in various sociodemographic cohorts can be proactivity addressed.[23] In addition, in light of ongoing research the ability of women and babies to thrive on breast milk irrespective of health status continuously changes due to developments in breast milk expression, breastfeeding methods to overcome barriers, and the growth of donor milk banks.

Labbok et al (2006) are generally optimistic about breastfeeding rates; given the increases in global figures between 1990 and 2000, in particular the increase in urban settings despite these areas having the greatest expected exposure to pressures against breastfeeding. However, these rates do vary, even within countries with regional variations apparent[24] (see Hannan et al, 2005) and this can be influenced by migration patterns with low income women from developing countries where breastfeeding is normal practice outstripping native low income (and higher income) women in countries of immigration for breastfeeding (Bonuck et al, 2005). The normalisation of breastfeeding is deeply embedded in social history and social context is highly influential on breastfeeding (Rickard, 2006; Thulier, 2009; Colodro-Conde et al, 2011). Breastfeeding in public is still taboo (for example, see Chapman, 2010) with Wolf (2008) arguing that the focus on the sexualisation of breasts has serious public health consequences. Culture, gender, politics, religion as well as science and industry have combined to affect feeding choices in the American context (Thulier, 2009). Colodro-Conde et al (2011) hypothesise that changes in Spain such as moving towards urbanisation, distance from female relatives, women in the workforce and men's increasing role in family childcare, have a greater influence on breastfeeding trends between 1960 and 2000 than education levels.

There are multiple reasons why women originally committed to breastfeeding might discontinue breastfeeding. Physical factors such as nipple pain or trauma certainly contribute to cessation (McClellan et al, 2012) among otherwise committed women. However this attrition rate may not always be unidirectional; women may alternate between periods of breastfeeding exclusively, partial breastfeeding and complementary breastfeeding (Haiek et

[23] For example, public opinion in Brazil has been successfully altered in favour of breastfeeding through a well-coordinated protection-promotion-support process (Perez-Escamilla and Chapman, 2012).
[24] For Ireland, Tarrant and Kearney (2008) cite breastfeeding rates in less populous areas as lower than in urban areas using data from 1986-2003.

al, 2007) while women have been shown to circumvent supplementary feeding in hospitals by reinstating breastfeeding exclusively at home (Bakoula et al, 2007). However it is likely that these are women who are particularly committed to breastfeeding, through personal determination or due to the cultural milieu. Wilkins et al (2012), in their antenatal and postpartum survey of 866 women in the UK (including Northern Ireland) found that infant feeding attitudes did not vary over this period. If women were ambivalent about breastfeeding during pregnancy then this was sustained over time. The US Preventive Services Task Force identified that effective interventions for extending breastfeeding duration are generally during the antenatal period, as part of a continuum of ongoing support for women and combining information with face-to-face guidance (Betzold et al, 2007).

Brodribb et al (2007) analysed a longitudinal dataset to determine the predictors for breastfeeding among Australian women. The most cited reason (96%) was that breast milk is better for the baby, with its benefits for the infant's immunity/allergy avoidance being the second and fourth most cited reasons respectively. In the top 10 reasons, women also cited more personal reasons; it is cheaper, more convenient, helps with weight loss, while advice and encouragement from partners, peers and healthcare workers were important but were cited less frequently. Later research (O'Brien et al, 2009) in Australia with focus groups comprised of mothers who had breastfed for differing durations and breastfeeding clinicians, considered the psychological factors they believed influenced breastfeeding duration. The main factors mentioned across the groups were the mother's priorities, self-efficacy, adaptability and stress, and her faith in her breast milk. These latter factors have a common thread of individual self-confidence. Scharfe (2012) undertook a prospective longitudinal study with 460 women in the postpartum period finding that women who were better able to cope with stressful situations were more likely to breastfeed, to do so for longer and to continue despite initial difficulties. Despite intentions to breastfeed, experiencing stress may have physical impacts; post-delivery stress measured using subjective surveys and objective cortisol level analysis among women who had intended to breastfeed has been found to be significantly associated with delayed initiation of lactation, lower milk volume, less frequent feedings and shorter duration of first feed (Doulougeri et al, 2013). This could partially explain why women who give birth vaginally are 1.5 times more likely to initiate exclusive breastfeeding, while women who have caesarean sections are less likely to exclusively breastfeed. However healthcare workers may discourage breastfeeding intent with kindness;

by removing the baby and supplementary feeding to give women who have had difficult births time to rest. (Labbok et al, 2008; Asole et al, 2009). Jordan (2006) concluded that although the evidence is not conclusive, women who have received high doses of analgesics in labour may require additional help with infant feeding. However, Marzan Chang and Heaman (2005) challenge evidence of links between deliveries and breastfeeding; finding no association between epidural analgesia during labour and delivery, and breastfeeding. The intention to breastfeed may outweigh physical barriers in the immediate aftermath of childbirth.

Britton and Britton (2008) tested their hypothesis that mothers with high self-concept[25] would be more likely to breastfeed than women with lower self-concept under two study conditions. Women exclusively breastfeeding at one month postpartum had significantly higher self-concept than women who formula-fed their babies, while women who were partially breastfeeding had intermediate levels of self-concept. Exclusively breastfeeding women scored higher on several individual dimensions of self-concept; in particular self-satisfaction, behaviour, moral worth, value as a family member and physical appearance. A higher self-concept may also be associated with the other demographic variables found to be determinants of breastfeeding such as education, age and socioeconomic status. Women may decide that they want to breastfeed in advance of becoming pregnant or during the pregnancy, in spite of cultural taboos (Wagner et al, 2006), because they are confident in their ability and their knowledge that breast is best.

A considerable amount of research has taken place in the US accessing women and infants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).[26] A lack of faith in the adequacy of breast milk, in particular with regard to smoking, drinking and nutritional intake of the mother creates ambivalence about breastfeeding (Chapman, 2010), with adolescent mothers' particularly lacking confidence (Mossman et al, 2008).

[25] In general terms, self concept refers to the image we have of ourselves, and is often used inter-changeably with self confidence. Britton and Britton (2008) used the Tennessee Self Concept Scale which is a standardised and multidimensional self-administered scale consisting of 100 descriptive positively and negatively worded statements. The scale consists of subscales that assess various aspects or dimensions of self concept which Britton and Britton (2008) highlight are important to consider these as separate domains as well as general self concept. This includes *inter alia* self satisfaction, behaviour, moral worth, physical appearance and value as a family member.

[26] This government-funded programme is designed to educate pregnant and postpartum low-income women about nutrition and breastfeeding, and provide these women and children with nutritious food. Approximately half of all infants born in the United States participate in the WIC programme (Chapman, 2013).

However, in a small sample of US teenage mothers, the opportunity to express milk by pumping was associated with longer provision of human milk (Hall Smith et al, 2012). Social supports are highly influential on WIC mothers' decision not to breastfeed. Low-income women who attended support groups were found to be more than twice as likely to intend to breastfeed compared with women who did not (Mickens et al, 2009), while relatives provide infant feeding advice when low income women feel that health care providers will not understand their circumstances (Heinig et al, 2006). A Canadian prenatal nutrition programme based in Quebec has proven successful with the breastfeeding initiation rate among low-income participants on a par with the overall Canadian initiation rate.[27] Research (Simard et al, 2005) among a random sample of women in this programme at two time points in the antenatal period and six months after birth established the factors associated with breastfeeding initiation and duration. The duration of breastfeeding was positively associated with the late introduction of solid foods, non-smoking, multiparity and education. The reasons for early weaning among women who initiated breastfeeding were the reasons generally found throughout the literature; nipple/breast pain, perceived insufficient milk supply, fussy babies, busy lifestyle, lack of support and embarrassment (Simard et al, 2005).[28] Among Aboriginal and Torres Strait Islanders in Australia, similar needs for supports, outreach and community based services alongside the usual strategies identified under the BFHI for encouraging breastfeeding initiation such as early mother-infant contact, have been identified as necessary to particularly encourage these populations to breastfeed (Shipp et al, 2006).

The factors associated with not breastfeeding or early weaning are well-established and the evidence for the role of personality and psychological factors and the potential benefits of confidence and self-efficacy among women before and during pregnancy and in the postpartum period is growing.

[27] See http://www.phac-aspc.gc.ca/hp-ps/dca-dea/prog-ini/cpnp-pcnp/ [Accessed 10 October 2013] for further information on implementation of this programme.

[28] Only about 5% of women actually have physiologic insufficient milk supply although up to 50% report that they perceive insufficient milk for the baby. Perception often coincides with softness of breasts, unsettled baby, slow weight gain in baby's growth pattern and frequent feedings all of which are amenable to education (Meedya et al, 2010).

6.4 What determines infant feeding decisions in Ireland?

The international literature shows that social and cultural contexts play an important role within the breastfeeding patterns, attitudes and experiences of families in different countries. In reality push and pull factors relating to infant feeding decisions operate to differing extents between countries and may be embedded in wider ethnic and cultural influences from both a mother's country of origin and country of residence. This section of the literature review highlights key findings from published studies and also published and unpublished research from the NUIG bibliography on infant feeding in Ireland to provide an overview of the determinants of breastfeeding initiation and maintenance within Ireland's unique social, family and cultural contexts.

As discussed in chapter 3, the steady increase in breastfeeding at hospital discharge in Ireland 2004-2010 was found by Brick and Nolan (2013) to be chiefly attributable to increasing maternal age and the increasing number of mothers from Eastern Europe resident in Ireland. Between 55% and 74% of the increase was explained by these changing characteristics. However despite the migration patterns to Ireland from countries where breastfeeding is the norm, in 2010 Ireland had the lowest 'any breastfeeding' of 14 European countries measured at birth and 48 hours postpartum (Brick and Nolan, 2013). Ladewig et al (2014) note that from analysis of GUI, maternal ethnicity and citizenship are among the strongest factors associated with breastfeeding initiation and duration in Ireland.

As mentioned in Chapter 3, the *National Infant Feeding Survey* was commissioned by NBSIC (Begley et al, 2008) and examined infant feeding in Ireland and the factors influencing women in Ireland to breastfeed. Overall, women who had planned to breastfeed prenatally were most likely to breastfeed when the child was born. Breastfeeding women tended to be older and in higher socioeconomic circumstances. Overall 50% of Irish women initiated breastfeeding, compared to 76% of non-Irish women but rates varied across the country. In the first 48 hours the highest initiation rate was for women in South East Dublin (78%), and women of higher socioeconomic employment categories, while first time mothers overall were most likely to breastfeed. However, women were consistent across their children; if they breastfed/formula fed/combination fed previous children they maintained this practice across their children. It is notable that in the qualitative element of this national

survey, women reported that healthcare professionals assumed that they would not breastfeed if they did not breastfeed a previous baby. The most frequently occurring problems in this first 48 hour period were getting the baby to latch and nipple problems. In the first 3-4 months of life, women who had attended antenatal classes, had been breastfed, had a normal delivery, and had friends who breastfed were more likely to breastfeed. Women in lower socioeconomic groups and with lower educational attainment were more likely to have given their babies additional foods at 3-4 months, and soother use was associated with a discontinuation of breastfeeding before 3-4 months. Women who had discontinued breastfeeding at 6-7 months cited a busy lifestyle, perceived insufficient milk supply, lack of facilities or discomfort with feeding in public as the main reasons for cessation.

The PHN visits were a very important support service for women in Ireland, while women cited their own experience as being the most important factor in relation to infant feeding; midwives, nurses and GPs were the second most important. Women stated that peer/support groups had the least impact (Begley et al, 2008). However two evaluations of breastfeeding support/skills groups in Ireland in Galway (Goonan, 2005) and Limerick (Hynes and O'Leary, 2007) were rated positively by mothers and these activities appeared to extend breastfeeding duration.

A small research study (Kenosi et al, 2011) with 67 fathers in Cork University Maternity Hospital found that three-quarters of the men were aware that breast milk was a healthier option for the baby compared to formula, but only half of the fathers (12 men) of formula-fed infants were aware of this. Kenosi et al (2011) concluded that fathers may be an underused resource for breastfeeding promotion. O'Donnell and O'Connell (2007) note that although the law is in situ to protect breastfeeding, such as breastfeeding in public and the workplace as well as extended maternity leave, the cultural barrier of embarrassment for both men and women in Ireland, is still an issue.

Tarrant and Kearney (2008) concluded that antenatal feeding intention to breastfeed is one of the most important independent determinants of breastfeeding initiation and 'any' breastfeeding at 6 weeks, while cultural barriers towards breastfeeding prevail in Ireland. In a small exploratory study with postnatal mothers, O'Brien et al (2008) noted that almost half of the group did not recall infant feeding being discussed at any of their antenatal visits with

GPs. A higher number of mothers who were breastfeeding at the time of the survey reported that breastfeeding was recommended to them by GPs during their antenatal visits, and this was more likely to occur when the GP was female.

Tarrant et al (2008; 2009; 2010; 2011; 2012) undertook research with a sample of over 400 mother-infant pairs recruited from the Coombe Women and Infants University Hospital in Dublin (2004-2006). This research found, though could not state causality, that infants receiving any breast milk were less likely to have had an illness during their first 6 weeks of life even after adjustment for potential confounding variables.[29] Tarrant et al (2012) concluded that mothers should be informed that although exclusive breastfeeding up to six months is a desirable goal, the provision of 'any' breast milk to their infants can confer health benefits. Tarrant et al (2009) found that the principal perceived reasons for initiating breastfeeding related to the optimum health benefits of breastfeeding, 'mother-led reasons' such as a wish to promote bonding, and encouragement from others. The reasons for not initiating breastfeeding included embarrassment in front of others, time and lifestyle restrictions associated with breastfeeding, a negative perception of breastfeeding as well as general preference not to breastfeed. Tarrant et al (2009, 2011) noted that any breastfeeding at six weeks was more common among primiparous mothers who were older and educated to third level, with breastfeeding far more common among non-Irish national mothers. Tarrant et al (2009) surmise that within this data that a positive antenatal intention to breastfeed is one of the strongest and persistent independent predictors of breastfeeding at six weeks. Discontinuing breastfeeding during the first six weeks was attributed to tiredness, frequency demands, and perceived inadequate supply (Tarrant et al, 2009). Just one Irish-national mother was still exclusively breastfeeding at six months in this Dublin sample.

In addition, an important aspect of infant feeding patterns which can also be socially and culturally defined is patterns of weaning to solid food. Tarrant et al (2010) found that a high proportion of infants in Ireland were prematurely weaned onto solids. The median age for introduction of solid foods was 16 weeks. Early weaning was associated with formula-feeding at 12 weeks and mothers' reporting of the maternal grandmother as the principal source of advice on infant feeding. Tarrant et al (2007) also cite younger age and lower

[29] One or more viral and/or gastro-intestinal related condition, e.g. cold, viral infection, constipation, gastro-oesophageal reflux disease, lactose intolerance, colic. For other reported adverse clinical outcomes in infants and mothers during the first six weeks postpartum see Tarrant et al, 2012:76.

educational attainment as determinants of early weaning. PHNs played an influential role in delaying the introduction of solids. A significant proportion of six month old infants were regularly consuming foods rich in refined sugars, energy, saturated fats and salt (Tarrant et al, 2007a; Tarrant et al, 2010).

Breastfeeding patterns among broad ethnic groups/nationalities in Ireland are dealt with in Chapter 3. However, there is little in depth information on the breastfeeding beliefs and experiences of ethnic minority groups in Ireland. The All-Ireland Traveller Health Study estimated a breastfeeding rate of 5.6% (UCD, 2010). Qualitative work with a small sample of Traveller women found that 'bottle feeding' was embedded in Traveller culture, with the researchers describing breastfeeding as *'culturally unacceptable'* for Traveller women (Reid and Taylor, 2007:255). Traveller women were embarrassed to breastfeed and had no recollection of midwives providing information about breastfeeding or encouraging them to breastfeed. Zhou et al (2010) administered a survey to a convenience sample of 322 migrant Chinese mothers in Ireland, finding that misconceptions and negative attitudes existed especially among less educated women. This was further compounded by some cultural beliefs among women who had been in Ireland for a shorter duration. Unsurprisingly, women with less awareness, more negative attitudes and misconceptions were the least likely to breastfeed. The Chinese women in this sample believed that breastfeeding would help them to regain their figures faster than formula feeding, but they also agreed that breastfeeding would make mothers' breast sag. Zhou et al (2010) stated that embarrassment particularly needs to be addressed, and this could be done in Ireland by providing appropriate public facilities, and giving mothers' information on clothing and positioning techniques to minimise exposure of the nursing mother.

As mentioned, in the setting of a Dublin-based maternity hospital Tarrant et al (2011) found that women maintaining breastfeeding at discharge tended to be older, educated to at least third level, reported positive encouragement from their partners, reported satisfaction with midwives support for breastfeeding, and engaged in exclusive breastfeeding for the first 24 hours after birth. There was no significant difference between the women who initiated and discontinued breastfeeding and the women who continued breastfeeding in terms of race, marital status, parity, smoking status, pre-pregnancy weight, type of delivery, rooming-in, duration of hospital stay or skin-to-skin contact. Women who continued to breastfeed cited

the health benefits of breastfeeding, convenience, and bonding as reasons to continue breastfeeding, while poor latch/suckling, perceived inadequate milk supply and fatigue and lack of freedom were the reasons for discontinuing. Breastfeeding rates in Northern Ireland and the Republic of Ireland are similar, and determinants of breastfeeding are also similar across the island (Sittlington et al, 2007). Sittlington et al (2007) noted that the self-administered Iowa Infant Feeding Attitude Scale (IIFAS) which was used in many of the research studies identified in the literature search, may prove useful in distinguishing between women in regard to infant feeding intention and outcome on the basis of education, socioeconomic status, income and marital status for targeting and evaluating interventions to promote breastfeeding.

Shortt et al (2012) undertook a qualitative study of infant feeding decisions among low income women in Ireland. This small sample had knowledge of the benefits of breastfeeding, but little practical knowledge while embedded in a social context of predominant formula feeding. Confidence was also an issue among this sample, with respondents citing embarrassment about breastfeeding on public wards of maternity hospitals and then being discharged to the privacy of their homes where they could breastfeed, but did not know how to. Women stated they needed professional support which was practical and non-pressurised. Murphy-Lawless et al (2005) noted that, among a small sample, women felt that they received excellent support during labour and childbirth, but that support evaporated after their babies were born. Meaney (2005; 2006; 2007) noted that this support needs to recognise that breastfeeding is more than a physical process, but also encompasses an emotional and intimate dimension. Muldoon (2005) states that first time mothers need more than one visit from a PHN during the early transition period, and highlighted the importance of providing the necessary knowledge and skills for mothers who have chosen to formula feed. This latter sentiment is echoed in Tarrant (2007b). Leahy-Warren (2007) also notes in research with mothers (n=99) that their principal identified supports across all domains of social support were husbands/partners, their own mothers and PHNs. Midwives were also important in terms of informational and/or instrumental support. Mothers in this sample reported that they relied on professionals for infant feeding information and would like more information from professionals in this regard. However, 41% also reported receiving conflicting information from professionals across all areas of infant care.

Determinants of breastfeeding identified in studies of women in Ireland are broadly similar to those seen in other countries - age, ethnicity, education and social supports are consistently identified as mediators of breastfeeding (see Hure et al, 2013). Determinants of breastfeeding appear to be common across the 'developed' world, therefore Ireland can learn from effective promotion activities in other countries. However, there are certain barriers/enablers to breastfeeding that may be particular to Ireland. For example, a risk of galactasaemia may act as a barrier to Traveller women initiating breastfeeding, and the time delay between discharge and a PHN visit may result in formula introduction in the interim (Shortt et al, 2012).

6.5 Promoting, supporting and protecting breastfeeding

Despite Ireland's low breastfeeding rate there are few published peer-reviewed evaluations of specific interventions to promote, support or protect breastfeeding that originate in Ireland. There is limited published documentation on the outcomes of interventions beyond the documentation relating to the operation of the BFHI in Ireland provided through their annual reporting mechanism. However, it was evident through the research process outlined in previous chapters that some services and interventions operating in Ireland have collected data on outcomes. For example, the teenage pregnancy clinic operating in Our Lady of Lourdes provided estimates of the increase in breastfeeding experienced in consecutive cohorts of teenage mothers attending their service. An evaluation of the Preparing for Life (PFL) early years programme provided evidence of a null effect on breastfeeding from their multi-faceted parent support programme operating in a deprived area of Dublin (PFL Evaluation Team, 2012). The lack of a specific national repository for outcomes associated with breastfeeding promotion and support interventions and services in Ireland limits the development of 'home grown' evidence that is grounded within the Irish social and cultural context and relevant to Ireland's unique health service structures.

Therefore, evidence of what definitely works, what might work and what does not work is based principally on findings from systematic reviews and published evaluations from other countries. Transferability of those findings to Ireland is therefore a pertinent consideration. Hector et al (2004) noted the shortcomings in available literature internationally; there is little evidence of effective strategies relating to public policy, supportive environments or community action. However the evidence is available for education and support strategies

designed to promote mothers' personal skills and health service strategies (including training of health professionals) to implement hospital practices that are conducive to breastfeeding.

Promoting breastfeeding initiation

A Cochrane systematic review conducted by Dyson et al (2005) evaluated the effectiveness of interventions which aim to change the number of women initiating breastfeeding, particularly focussing on low income women in high-income countries. A small number of studies were included, principally from the US. Breastfeeding education was found to have a significant effect on increasing initiation rates compared to 'standard' care. Subgroup analysis showed that one-to-one, needs-based, informal repeat education sessions and generic, formal antenatal education sessions are effective in terms of an increase in breastfeeding rates among low income women regardless of ethnicity and feeding intentions.

Lumbiagnon et al (2011) also undertook a systematic review which identified all published, unpublished and ongoing randomised controlled trials (RCTs) assessing the effectiveness of formal antenatal breastfeeding education or comparisons of different methods of formal antenatal care on breastfeeding education. RCTs that included intrapartum or postpartum breastfeeding education were excluded. Methodological limitations and small observed effect sizes made definitive conclusions impossible, however peer counselling alone was found to be effective in increasing initiation of breastfeeding; a combination of written material, video and lactation consultation was found to be effective for exclusive breastfeeding at three months, and this also occurred at six months. The lactation consultation appeared to make the difference at six months when compared to the written material and video only.

Fatigue is often identified as a reason to introduce alternative methods of infant-feeding such as formula feeding as it can be perceived to be the easier option. However, Callahan et al (2006) found no difference between bottle and breast feeding mothers for perception of fatigue. Better advance preparation of women for postpartum fatigue may help to maintain breastfeeding and for more realistic expectations with regard to infant feeding decisions. Heinig (2010) acknowledges the conflict; whereby women need to rest after childbirth but supplementary feeding can interfere with latch, displace colostrum and shorten breastfeeding time. Suggestions to circumvent this problem by Heinig (2010) include preparing women for the experience of postpartum fatigue through education and teaching women how to

breastfeed on their sides. Heinig (2010) suggests prolonging hospital-enforced 'rest periods' during the day and limiting visitors to allow mothers more time for undisturbed rest, delaying intrusions by ancillary staff until late morning and organising nursing activities to allow mothers additional rest time. Heinig (2010) also cites infant crying as being directly associated with maternal tiredness and fatigue. Infant crying can lead to early introduction of pacifiers which may; interfere with breastfeeding, however Chapman (2009) cites a study whereby this was not found to be the case as long as breastfeeding had been well-established prior to pacifier introduction.

What works in the context of the BFHI?

As mentioned, BFHI was launched by the WHO and UNICEF in 1991 following the Innocenti Declaration in 1990. This initiative has been found to have a positive impact on breastfeeding initiation; however exclusivity up to six months is still a significant challenge. This has led to the consideration of extending Baby-Friendly designation into communities.

Table 6.1: The Ten Steps to Successful Breastfeeding[30]

Every facility providing maternity services and care for newborn infants should:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement this policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within half an hour of birth.[31]
5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
6. Give infants no food or drink other than breast milk, unless medically indicated.
7. Practice 'rooming-in' – that is, allow mothers and infants to remain together 24

[30] Source**:** *Protecting, Promoting and Supporting Breastfeeding: The Special Role of Maternity Services,* a joint WHO/UNICEF statement [http://www.unicef.org/newsline/tenstps.htm]

[31] This step is now interpreted as place the baby in skin-to-skin contact with the mother immediately after birth for at least an hour and encourage the mother to recognise when the baby is ready to breastfeed, offering help if needed [BFHI Global Criteria 2011].

hours a day.

8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soother) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

An analysis of GUI data found that children born in a BFH in Ireland were 11% more likely to be breastfed than children born in a non-BFH accredited hospital but only once adjustment had been made for a large number of factors. The analysis suggests that the effect of BFHI accreditation weakens over time after discharge from hospital (Layte and McCrory, 2014).

A large scale 24 hour dietary recall in Switzerland with 3,032 women was cross-referenced with information regarding BFHI designed maternity hospital births. Compliance with BFHI guidelines was positively associated with breastfeeding for infants born in these hospitals. The positive effect was demonstrated for rooming-in, suckling within 1 hour after birth, breastfeeding on demand and lack of pacifier use. This effect remained when controlling for factors associated with not breastfeeding or early weaning such as maternal smoking, weight, nationality, education and type of delivery (Merten et al, 2005). Similarly, Merewood et al (2007) note that the Baby-Friendly Boston Medical Center, serving a low income community has breastfeeding initiation and rates that match or exceed national and regional levels at six months. New Zealand has developed a widespread programme for the implementation of BFHI, and the results to date have been positive (Geddes, 2013). Ninety-one per cent of hospitals are BFHI accredited with an increase in exclusive breastfeeding initiation rates up from 56% to 84%.[32] Geddes (2013) credits this success with buy-in from government and the creation and extension of alliances. Martis and Stufkens (2013) outline this transition in New Zealand. Breastfeeding advocates had limited success at establishing the BFHI until the New Zealand Breastfeeding Authority was established in 1999. This Authority had oversight of BFHI implementation and auditing, consumer participation levels and the recertification requirements of midwives for breastfeeding education (by the Midwifery Council), while maternity facilities were given paid BFHI coordinator posts. This is not to suggest that New

[32] Geddes (2013) does not state what period this relates to.

Zealand's experience has been without challenges; Moore et al (2007) outlines the barriers encountered in implementing the first two steps of the BFHI in a public hospital system. Hospitals were at varying stages of BFHI development, hospital policy was not necessarily based on government policy, hospital policies were communicated in different ways and dependent on resources, factors outside of hospital control impacted on capacity to improve breastfeeding rates, and complex organisational matters posed a barrier to educating personnel (Moore et al, 2007). The next step for New Zealand is to focus on community providers achieving Baby-Friendly Community Initiative accreditation as the community exclusive breastfeeding rates have not shown the same level of improvement.

Italy introduced the Baby-Friendly Community Initiative (BFCI) following a UNICEF Italy working group review beginning in 2006 (Bettinelli et al, 2012). In 2007 the Italian BFCI Seven Steps were published and following this, UNICEF Italy launched the Standards for Best Practice for hospitals and communities based on the 2009 BFHI[33] and UNICEF UK BFCI materials. At the time of writing, Bettinelli et al (2012) state there is one Baby-Friendly community in Italy, with 17 others working on various stages. Bettinelli et al (2012) state that BFCI is a complex process that needs participation, training, audits, continuous feedback and resources for health workers and families. Some interesting examples include; local health authorities becoming centres of breastfeeding support, Baby Pit Stops in Milan to provide breastfeeding space for women, and breastfeeding friendly pharmacies where all staff undertake a 15 hour course, only sell breast milk substitutes upon specific request and avoid all promotional activity related to the marketing of breast milk substitutes, bottles and teats.

There are many barriers and facilitators to instituting such large changes in hospitals and communities. The literature principally notes these in the BFHI rather than the BFCI. In Ireland a Baby Friendly Community feasibility report was developed in 2007. This report demonstrated a generally high level of interest in Baby Friendly Community Health Service Initiatives among respondents, who were principally health care workers and mother support groups. The most suitable point of entry identified for such initiatives are primary care teams and networks, but in the absence of these, health centres or GP practices would also be suitable alternatives. The report provided detailed recommendations and an action plan (Becker and Boyle, 2007).

[33] See Saadeh (2012).

Labbok et al (2013) explored BFHI in hospitals that predominantly serve low wealth populations. The barriers and facilitators to progress on the ten steps are outlined in Table 6.2. Labbok et al (2013) note that monitoring of data and implementation that is reflective of knowledge and practice is essential to the success of BFHI. Merewood (2012) also raises this issue of slippage; once established keeping the Baby-Friendly Initiative on the agenda can be difficult and it can be a struggle to enforce recertification. An electronic method for reassessment of compliance with the 10 steps was due to be piloted in 2012 (Hansen et al, 2012).

Table 6.2: Perceived barriers and facilitators to progress on the Ten Steps (Labbok et al, 2013:9)

Barriers:

- Older nurses and physicians
- Staffing constraints – need more lactation consultants
- Interference in mother's choices
- Increasing caesarean section rate
- Assumptions re: Hispanic culture
- Lack of self-efficacy among nurses
- Perception negative to rooming-in
- Perception physicians will oppose policy changes
- Nights: staff practices
- Expense of baby friendly designation and budget constraints
- Perception that lactation consultant alone is responsible
- Too many visitors in labour and delivery
- Pacifiers are needed for 'fussy' babies and for the transition period
- Rooming-in will create patient dissatisfaction

Facilitators:

- Ready availability of in-hospital breastfeeding rates
- Rounding on progress/statistics
- Opportunities for staff to discuss and consider
- Advocacy for breastfeeding at multiple levels within the facility
- Strong management support for the 10 Steps
- Creating an atmosphere of openness to changing practices
- Emphasising and demonstrating benefits to nurses
- Including breastfeeding support in personnel evaluations
- Seeing mothers utilising lactation services
- Hands-on training

Semenic et al (2012) undertook an integrative review to identify and synthesize information on the barriers, facilitators and recommendations related to the BFHI from international peer reviewed literature. An integrative review allows for the synthesis of findings from experimental as well as non-experimental studies (e.g. qualitative studies) as well as data from theoretical and empirical literature. Semenic et al (2012) categorized findings into socio-political, organisation-level and individual level barriers and facilitators. The key factors under these categories are summarised in Table 6.3.

Table 6.3: Barriers and Facilitators to Implementation of the Baby-Friendly Initiative (BFI) (Semenic et al, 2012)

Sociopolitical Barriers and Facilitators to Implementation of the BFI:

- Support of national health policy or health professional bodies
- Integration of health services
- Cultural norms related to breastfeeding
- Strength of infant formula industry
- Legislation to protect, promote, support breastfeeding
- Socioeconomic disparities
- Pre-service training

Organisational-level Barriers and Facilitators to Implementation of the BFI:

- Leadership of BFI programme
- Organisational culture/philosophy of care
- Human and financial resources
- Audit and feedback mechanisms
- Breastfeeding policies
- Breastfeeding training
- Infrastructure and routines
- Hospital reliance on formula company products

Individual-level Barriers and Facilitators to Implementation of the BFI:

Health care providers:

- Knowledge/skills related to breastfeeding
- Staff attitudes towards the BFI
- Discomfort promoting breastfeeding

- Use of formula, bottles and pacifiers

Mother/family members:

- Knowledge about breastfeeding and the BFI
- Mothers' beliefs and practices related to breastfeeding
- Birthing experiences
- Family support and other resources

Semenic et al (2012) provide detailed recommendations for how to overcome these barriers and maximise facilitators. McKeever and St. Fleur (2012) also detail how organisational barriers such as staff resistance to change were overcome in one US hospital. Through engaging the staff to establish the reasons for reluctance, it was possible to overcome these barriers. Changes in practice that led to better outcomes and improved processes for staff spread and compliance increased; the hospital is awaiting BFHI accreditation. Zakarija-Grkovic et al (2012) evaluated the impact of BFHI training on hospital practices and breastfeeding rates during the first 12 months of life in a hospital in Croatia. After three months, training had significantly improved three of the Baby-Friendly practices (Steps 4, 7, 8), and exclusive breastfeeding rates during the first 48 increased. However after discharge there was no improvement in rates at three, six and 12 months. Zakarija-Grkovic et al (2012) believe this was due to a high rate of in-hospital supplementation, and noted that their results contrasted with similar research in Italy. The authors state this may be due to the way training was delivered (didactic rather than interactive) and the hospital's strong breastfeeding policy which was a different situation to that of Zakarija-Grkovic et al (2012) experience in Croatia.

While all of the BFHI steps should be implemented to maximise effectiveness, Giovannini et al (2005) considered the effectiveness of combinations of particular steps. Giovannini et al (2005) considered the determinants of exclusive versus predominant breastfeeding in Italian maternity wards. Alongside the usual determinants of breastfeeding such as caesarean section delivery and mother's weight, non-compliance with steps 6, 7, and 8 were determinants of predominant as opposed to exclusive breastfeeding. Nickel et al (2013) used data from the US national Infant Feeding Practices study to consider how non-compliance with each of the ten steps and combinations of two steps influences at-breast breastfeeding duration. Lack of step 6 (no human milk substitutes) was associated with shorter breastfeeding duration compared with being exposed to this step, with a 10.5 week decrease. Lack of step 4

(breastfeed within 1 hour after birth) and step 9 (providing the infant with a pacifier during the hospital stay) together were related to the greatest decrease in breastfeeding duration of almost 12 weeks. Being exposed to six of the steps was associated with the longest median duration of breastfeeding, being exposed to four to five steps led to a median duration of almost 40 weeks while two to three steps led to a median duration of breastfeeding of a little over 36 weeks.

A note of caution may be necessary; BFHI results are encouraging, but Byron-Scott and Baghurst (2006) note that sociodemographic and cultural determinants may outweigh BFHI and work against breastfeeding duration.

Supporting breastfeeding duration and exclusivity

Byron-Scott and Baghurst (2006) review of literature on strategies to support breastfeeding found that the majority of RCTs considering intervention effectiveness to increase breastfeeding duration found no effect. However, identifying women's support needs prior to interventions may show some promise based on the results of a Canadian peer support programme. Byron-Scott and Baghurst (2006) found that breastfeeding duration can be influenced by two main intervention types; education and support, where short term breastfeeding duration can be influenced by education programmes alone. The mode (e.g. group or individual, skills of practitioners) and timing (e.g. antenatal plus postnatal) of these interventions is crucial to success. One-to-one or small group formats can be enhanced by home visits and individual sessions postnatally, while written materials alone are largely ineffective.

This is supported by another Cochrane systematic review by Renfrew et al (2012a) which found that breastfeeding support interventions increase the number of women continuing to breastfeed and the number of women continuing to exclusively breastfeed. The types of intervention included contact by either a professional or volunteer offering supplementary support to standard care. These supports included elements such as reassurance, praise, information and the opportunity to discuss and respond to questions, and also included interventions with staff training to improve the supportive care given to women. Excluded interventions were those that took place in the antenatal period only, or interventions described as solely educational in nature. Renfrew et al (2012a) concluded that strategies that

rely mainly on face-to-face support are more likely to succeed. Support that is offered reactively when women initiate the contact is unlikely to be effective and women should be offered ongoing scheduled visits to predict the support that will be available to them. Effective support may be provided by professionals, lay workers or peers or a combination of these. Renfrew et al (2012a) note that reporting on the details of the included studies was not comprehensive, for example in terms of describing the intervention components such as training details or qualifications. Meedya et al (2010) in their extensive literature review of factors that positively influence breastfeeding duration to six months similarly found that interventions to increase breastfeeding duration are not widely published. Meedya et al (2010) note that motivational interviews, interventions to increase maternal self-efficacy and materials with breastfeeding role models are potentially more effective than interventions that provide knowledge alone. Meedya et al (2010) note that combining interventions that are known to be effective may be an appropriate course of action; such as enhancing breastfeeding intention, self-efficacy and supports, providing a framework for a midwife-provided educational intervention for women and their partners beginning in the antenatal period and continuing with follow-up support up to six months partpartum or at weaning.

As mentioned, education before and immediately after birth may be effective in improving rates of initiation, but education has also been found to be effective for increasing duration but not where it is reliant on written materials (Hector et al, 2004). Peer and professional support have a significant impact on breastfeeding duration and exclusivity at one to three months, while longer term supports that are intensive and generally comprise face-to-face information, guidance and support are effective.

What works in community-based and peer to peer supports?

Labbok (2012) undertook a systematic review of literature (1999/2000–2011) to consider community interventions to promote optimal breastfeeding. The general findings of this review for selected large-scale community-based programmes were:

1. The community offers indispensable resources for breastfeeding promotion and support, and these resources need continual mentoring and encouragement.
2. Multiple programme frameworks offer opportunities for community-based breastfeeding promotion and support.

3. Breastfeeding practices can change over a relatively short period and need continued reinforcement to be sustained.
4. Effective communication and advocacy are vital to set policy priorities, influence community norms, and improve household practices.
5. More attention needs to be given during training to interpersonal counselling skills.
6. Programme scale up is facilitated by partnerships, leadership, proof of concept (i.e. evidence) and resources.
7. Monitoring and evaluation is critical to measure progress, identify successful and unsuccessful strategies and make appropriate programme adjustments.

Labbok (2012) also found that programmes that either build on the shoulders of existing breastfeeding programmes or are integrated into other accepted interventions are more effective than single-purpose programmes that are introduced in isolation. Programmes that emerge from the community or in which there is active involvement of community-based change agents appear to have significant impacts.

Meier et al (2007) outline a qualitative evaluation of a breastfeeding peer counsellor programme in Michigan's WIC programme. Meier et al (2007) outline the practical elements of recruitment, ongoing and initial training and skills needed to be a peer counsellor. Peer counsellors are required to provide the following services to participants: (1) if enrolled prenatally, at least 1 prenatal home visit, plus monthly telephone calls up to delivery; (2) a visit in the hospital if this policy is established by the local agency and the hospital; (3) a phone call within 2 days following delivery; (4) at least 1 home visit as soon as possible after hospital discharge and another during the first month (additional home visits are encouraged, as necessary); (5) at least weekly phone calls during the first month; and (6) at least monthly phone calls through the first year of breastfeeding. A client completes the programme when the peer counsellor has made a minimum of one home visit and the mother has either breastfed for 12 months or has weaned her baby. While the programme outlined by Meier et al (2007) shows good evidence for a workable peer counsellor programme, Bignell et al (2012) were less encouraged by unpaid counsellors' skills potentially due to differences in training. Bignell et al (2012) examined the determinants of support strategies and services provided by (US) community-based breastfeeding counsellors and compared the differences in support provided by paid and volunteer counsellors. Full-time and paid counsellors were

more likely to be associated with face-to-face counselling, use of client-centred counselling skills, making referrals to social service agencies and helping to position the baby. The role of stress-relief cannot be under-estimated with Hauck et al (2008) showing the positive effects of Snoezelen[34] rooms for postpartum breastfeeding women. This small sample of women were able to overcome anxiety; achieving relaxation in the room with total one-to-one focus with their child away from interference and the social barriers to breastfeeding, while knowing that support was on hand if required.

Breastfeeding peer support shows promise in terms of its potential for providing within-community, non-medicalised, broad support for breastfeeding. Although breastfeeding peer support may be associated with an increase in breastfeeding continuation in low and middle income countries, its impact is not as significant in higher income countries (Trickey, 2013). However, within higher income countries there may be particular factors that appear to contribute to greater success. It is difficult to quantify and assess the added-value of peer support interventions (Trickey, 2013). Levels of intensity, face-to-face versus remote contact, rapport, predictability of visits, and quality of information all influence the effectiveness of breastfeeding peer support programmes (Trickey, 2013; Woodman, 2013). However given the considerable range of other variables influencing initiation and duration of breastfeeding; the effectiveness of peer support is not always immediately apparent and there are varying evaluations of outcome efficacy (See Woodman, 2013). Judging effectiveness from a deficit base (i.e. how many women would otherwise have not ever breastfed, or given up quickly) rather than an assets base (i.e. how many women wanted to/were encouraged to breastfeed and are able to, and maintain breastfeeding as desired due to peer support) may not provide the whole picture. Peer support may be providing that extra pillar of support that women who are breastfeeding/want to breastfeed require. In other words, in our focus on the women who are not breastfeeding, we cannot forget peer-to-peer supports that are helping women who are already breastfeeding or who want to breastfeed.

Bolton et al (2009) in their analysis of a peer counselling support programme for low-income women suggest that these programmes could be improved through targeting women identified to be most likely to cease breastfeeding early; younger women and those without

[34] A Dutch concept from the 1970s for people with disabilities. An indoor environment using controlled stimuli promotes comfort and relaxation. The user is exposed to multiple sensory stimulations combining vision, touch, sounds and aroma.

breastfeeding experience who are more likely to introduce formula. Feldman-Winter and Shaikh (2007) describe a programme with adolescent mothers, 'Centering Pregnancy' that accesses women who fit Bolton et al's (2009) description of women most likely to wean early. This programme utilises group sessions, peer role models, and teen-friendly education activities and is based around ego development in the adolescent. This programme has not only increased breastfeeding rates, but it has also been effective in lowering rates of preterm delivery, low birthweight and caesarean sections. Feldman-Winter and Shaikh (2007) also note the potential of accessing grandparents who the adolescent lives with to overcome the barriers to breastfeeding. Although these levels of support for targeted cohorts may be intensive, they may be more cost-effective than low level support which may have no impact.

Health professionals: supporting infant feeding decisions

Hoddinott et al (2012) undertook a qualitative study in Scotland with health professionals and people receiving infant feeding advice. Information materials/education mechanisms were considered too theoretical and unrealistic for real-world experiences. Incremental goals, rather than an idealistic global policy of six month duration of exclusive breastfeeding were considered preferable by this sample.[35] Hoddinott et al (2012) recommend that health professionals should move away from checklists and rather ask open questions about experiences, values, priorities and goals talking about how infant feeding will fit with family life. Active and pre-emptive discussions specific to the family's own needs are the ideal. Discussions and observed breastfeeding sessions tailored to the individual are preferable as well as assistance at times when weaning was being considered. One method for delivering tailored information is home-based video conferencing support which was found in a pilot study to have potential for supporting breastfeeding mothers in their homes to achieve optimal LATCH[36] scores (Rojjanasrirat et al, 2012). Kronborg and Kok (2011) developed a postnatal education programme to support breastfeeding women in community settings, addressing the issues of tailored supports and inconsistencies in professional advice. This programme was an add-on to an existing health visitor delivered programme. Kronborg and

[35] Recent qualitative work with women in Ireland also concluded that there can be unrealistic expectations around breastfeeding and feelings of guilt for not breastfeeding [unpublished PhD by Louise Gallagher, in personal communication with the National Breastfeeding Coordinator].
[36] See Riordan et al (2005).

Kok (2011) outline the methods of implementing similar programmes using various strategies and addressing training needs.

Aside from, or in addition to, women who may be from lower socioeconomic backgrounds, there are others who may also require more intensive supports, for example women who have had a traumatic delivery or who have been separated from their infant at birth due to health complications.[37] Sheehan et al (2007) analysed outcomes from an Ontario Mother and Infant study that suggests the provision of a single post discharge phone call and the offer or acceptance of a postpartum home visit is insufficient to support breastfeeding at four weeks. Telephone support may not be sufficient;[38] a survey of callers' attitudes and experiences of a UK breastfeeding helpline showed that it is a valued service providing reassurance and confidence and made women who were already breastfeeding determined to continue but it did not influence breastfeeding decisions (Thomson and Crossland, 2013). Therefore, telephone support may be a valuable tool to support women who already want to breastfeed and to maintain it to six months and beyond, but for women who are considering breastfeeding cessation or who never wanted to start, telephone support may have no role.

Thomas and Shaikh (2007) outline the potential for electronic communication between the breastfeeding woman and her physician that could help to sustain breastfeeding by reducing the need to attend a practice for an easily resolved problem. However, the credibility of the health care professional's advice for the woman has also been identified as important. Heinig et al (2009) identified 'credible' sources of professional advice; where the professional is empathetic, trustworthy, experienced, calm, confident, accessible and consistent. Males were considered less credible than females. However, personal experience does not necessarily provide sufficient knowledge in a professional capacity to adequately inform and support mothers (Creedy et al, 2008). Across all professional advice, from prenatal to postpartum care in the community, there is a need for advice to be consistent (Lamontagne et al, 2008; Tohotoa et al, 2009; Bäckström et al, 2010; Hussainy and Dermele, 2011). Training needs to be standardised (Sullivan et al, 2011) and ongoing; Tappin et al (2006) outline the effects of

[37] See Thompson et al (2010) for a discussion of breastfeeding barriers following a significant primary postpartum haemorrhage.

[38] A peer counsellor programme in Hong Kong with scheduled telephone calls did not provide any evidence of prolonging breastfeeding however this may be due to the low value placed on breastfeeding in the population and authors concluded that such programmes need to operate as part of a BFHI or 10 steps programme (Wong et al, 2007).

health visitors on breastfeeding in Glasgow as part of the community component of the UNICEF Baby Friendly Initiative and found that breastfeeding cessation was more likely if the health visitor had no breastfeeding training in the previous two years. McIntyre (2006) outlines how health professionals can stay abreast of good practice, while Ingram (2006) describes a CD-ROM breastfeeding learning package aimed at General Practitioners (GPs). The latter approach may be more appropriate for health practitioners who have occasional contact with pregnant/postpartum women while McIntyre's (2006) approach may be more appropriate for health practitioners with daily and direct work applicable to breastfeeding.

Two studies with health professionals in Ireland identified some of the resources required for supporting breastfeeding. Mulcahy et al (2011) undertook a survey with directors of public health nursing (DPHN) and PHNs in Ireland. Currently, a 20 hour formal breastfeeding education programme is available to PHNs in Ireland and at the time of the survey an 18 hour course was also available. However, Mulcahy et al (2011) found that continuing education and updates to breastfeeding knowledge were needed, and while partners of the breastfeeding woman were encouraged by PHNs,[39] there was less encouragement by the PHN of the wider support network (maternal grandmothers or friends). The original report on which this article is based (Leahy-Warren et al, 2009) showed a disconnect between the DPHNs and PHNs. The DPHNs overestimated the updating of knowledge by PHNs, while the PHNs stated that they did not have easy access to continuing education or information resources. There were also significant differences between DPHNs and PHNs in their perception of organisational culture and its amenability to breastfeeding.

Whelan et al (2011) undertook a survey of health professionals (GPs, public health nurses, practice nurses) in north Dublin, and found gaps and inconsistencies in knowledge and attitudes to breastfeeding, while professionals were aware and acknowledged that women receive conflicting advice from health professionals. Ward et al (2011) reviewed 15 studies from nine countries analysing the practice of continuing education on breastfeeding for health professionals, with a specific focus on nurses and midwives. The findings support the WHO recommendation that at least 18 hours education for all health professionals who advise pregnant women/women with children should be undertaken. Continuing education was

[39] In international research, partner support has been shown to be predictive of maternal confidence in breastfeeding (Inoue et al, 2012; Mannion et al, 2013).

found to improve knowledge, skills and practice as well as compliance with the BFHI. However, if institutions are constrained by finance or staffing levels, low cost interventions which could be undertaken in time already set aside for professional education can be effective in improving knowledge and breastfeeding practices (Ward et al, 2011). Ward et al (2011) are also enthusiastic about making the healthcare professional a champion; and a good method for achieving this is outlined by Spatz and Sternberg (2005). A breastfeeding course was developed as part of a nursing qualification at the University of Pennsylvania. Nursing students undertake a practical breastfeeding advocacy project in communities, and many of these projects are sustained after the student has moved on.

Infant feeding messages

However, methods of breastfeeding promotion must be mindful of being off-putting. The use of risk-based messages can increase stress and disengagement (Heinig, 2009), and a dogmatic approach may overburden women (Heinig, 2007). Instead, women who do not breastfeed or who wean early provide an opportunity for health care workers to identify the issues involved to inform promotion in the future, and if there is a physical barrier to find out how to overcome it (Heinig, 2006). Public health breastfeeding promotion campaigns must also be mindful of how the target audience access information, in particular new media and attitudes towards deciphering and interpreting information. Generation Y may respond best to short, interactive and engaging messages about breastfeeding delivered from a number of environments, however in whatever format it is delivered, information needs to be accurate and consistent (Heinig, 2009a).

Involving fathers

The need for accurate and accessible information is a priority issue with regards to engaging fathers in breastfeeding support. Mitchell-Box and Braun (2013) undertook a systematic review of male partner focussed breastfeeding interventions on initiation, exclusivity and continuation. Four unique interventions were included; and interventions were shown to impact on initiation and exclusivity.[40] Mitchell-Box and Braun (2013) recommended that more research was needed to understand how interventions are best delivered to fathers and

[40] These four provided breastfeeding education to fathers, with breastfeeding outcomes reported by the mother. Three of the four studies compared initiation rates between intervention and control conditions, and two showed significantly higher rates of breastfeeding initiation in the intervention group. Although studies were inconsistent in their categorization and reporting of full, partial, or no breastfeeding, significantly higher rates of breastfeeding initiation, exclusivity, and/or continuation were seen for two interventions.

supplemented to improve outcomes. Fathers' attitudes are identified as one of the principal determinants of breastfeeding decisions and experiences for women, and encouraging them to become part of a 'breastfeeding team' is an important way to encourage and include them (Wiessinger, 2009; Kenosi et al, 2011; Rempel and Rempel, 2011; Inoue et al, 2012; Mannion et al, 2013). However, this must be culturally appropriate in terms of male roles in society (Odeh Susin and Justo Giugliani, 2008). A successful example of an intervention that is both with men and a minimal intervention is the Fathers Infant Feeding Initiative. This RCT in Western Australia is a two hour antenatal education session and postnatal support intervention for fathers which had positive impacts on any breastfeeding at six weeks (Maycock et al, 2013). This initiative with five male educators held a total of 45 sessions across eight maternity hospitals.

Encouraging appropriate techniques including milk expression

De Oliveirba et al (2006) undertook a RCT with women on a maternity ward to improve breastfeeding technique that involved a 30-minute counselling session. However it was found that one session was insufficient to improve technique and problems of sore nipples, engorgement and mastitis occurred with the usual incidence rate. Bolman et al (2013) studied breast massage in Russia and its ability to assist with such problems, the BFHI guidelines state that women should be taught how to manually express milk prior to discharge; and massage to assist in alleviating some low-level problems could potentially be included in such teaching. Breastfeeding positions such as the 'Koala-hold' (see Thomson, 2013) or reclining may be effective at reducing some of these problems however there are no set rules about breastfeeding positions but different positions may help to reduce or prevent nipple damage, can be useful for women who have had caesarean sections, and for infants with cleft palate or reflux issues.

When at-breast feeding is not possible, expressed milk can be an alternative option. An electric pump loan programme for WIC participants in Los Angeles found that women who received a pump did not request formula until an average of 8.8 months, whereas women who did not receive an electric pump but had stated their intention to breastfeed, requested formula on average at 4.8 months (Meehan et al, 2008). Becker et al (2011) undertook a systematic review on methods of milk expression. Low cost measures such as hand expression and lower cost pumps can be as or more effective than large electric pumps.

Chamberlain et al (2005) cite an interesting example from Boston Medical Center, which is a BFH in a low income inner city area. Upon implementation of Baby-Friendly policies, the hospital breastfeeding initiation rate rose from 58% to 87% in 3 years and exclusive breastfeeding within the hospital increased from 6% to 34%. To respond to the need for breastfeeding supports after discharge, Boston Medical Center established a breastfeeding telephone support line. A five year review of reasons for calls found that the most common reason was help to obtain a breast pump or information about them.

Workplace support for breastfeeding

Women who have more education are more likely to breastfeed, and these women are also more likely to have greater flexibility and control over their work schedules to express breast milk (Chamberlain et al, 2005). Dabritz et al (2009) found in research based in California that the more education a woman had, the greater the likelihood that she had access to a lactation room in the workplace environment. Corporate lactation programmes may include components such as a private area to express milk, breastfeeding equipment, storage and educational materials.[41] However expressing milk may be inadequate to maintain milk flow and direct breastfeeding with contact between mother and infant throughout the day is preferable (Ogbuanu et al, 2011). The benefits to the employer for encouraging breastfeeding may include reduced absenteeism, higher productivity, increased morale and retention but there are no RCTs to identify optimal workplace interventions to support breastfeeding according to a Cochrane systematic review (Abdulwadud and Snow, 2012). In Ireland, the IFS found that not being in employment was correlated with breastfeeding at six months. Facilities to express breast milk were not provided by the employers of 47% of the mothers returning to work in this survey with a further 27% unaware of whether facilities existed or not. Availability of facilities was associated with longer breastfeeding duration among employed women, however causality cannot be assumed (Begley et al, 2008).

Protecting families from inappropriate marketing of breast milk substitutes

Aside from returning to work, there are many reasons why women may choose to wean early or formula feed infants.[42] Article 4 of the WHO International Code of Marketing of Breast Milk Substitutes (the Code) states that infant feeding educational materials designed to reach

[41] Smith (2006) outlines specific information on the contents of a breastfeeding educational demonstration DVD for employers, the public and breastfeeding women.
[42] See Begley et al (2008:6) for some of these reasons in Ireland.

pregnant women and mothers of young children should include information on the superiority of breastfeeding, the risks of artificial feeding, the negative effect on breastfeeding of introducing partial bottle feeding and the difficulty of reversing the decision not to breastfeed. However, Heinig (2006a) argues that marketing is often not a matter of consumer choice as it cannot be an informed choice given the sophisticated methods of advertising products. Dyson et al (2005) reviewed one evaluation of hospital breastfeeding promotion packs compared to formula company produced materials and this intervention proved ineffective as approximately 40% of women in each group reported receiving formula company promotion items from sources other than their obstetric provider.

Feldman-Winter et al (2012) assessed if the removal of industry sponsored formula sample packs from a New Jersey hospital would influence breastfeeding rates. Despite efforts, the research was contaminated by women receiving formula bottles within the hospital but even with this, the removal was associated with increased breastfeeding over ten weeks. Abrahams (2012) examined the extent to which each of 11 infant formula brands widely available in the US had established a social media presence in popular social media venues likely to be visited by expectant parents and families with young children. A social media presence through Facebook, interactive features on their own websites, mobile apps, YouTube videos, sponsored reviews on parenting blogs and other financial relationships with parenting blogs were found. Gunter et al (2013) similarly found in the UK that websites are being used by formula manufacturers to circumvent the WHO Code. Gunter et al (2013) considered five leading UK formula manufacturers sites in 2009 and again in 2012. In the intervening time, the provision of product specific information had improved on three of the five sites; however two of the leading manufacturers continue to use their sites as sources of information about infant formula and can be directly accessed by consumers in contradiction of the legislation restrictions in the UK. The Code predates the advent of widespread social media and these emergent marketing practices present challenges for the implementation and monitoring of the Code's provisions.

The Food Safety Authority of Ireland (FSAI, 2007) undertook a survey of maternity units and children's hospitals, and reviewed retails outlets, formula company websites, advertisements in specialist publications and women's magazines to check for compliance with infant formula promotion regulations. The Commission Directive 91/321/EEC and its transposed

legislation for Ireland (S.I No. 242 of 2004) was found to be difficult to assess in terms of compliance due to the subjective nature of some aspects of the regulation. However, overall the compliance was generally good but was found to be poor in advertisements in specialist publications and in leaflets aimed at health professionals. FSAI (2007) recommended that manufacturers only provide healthcare professionals with information on request, as required by regulations.

Market research (Food for Thought, 2013) outlines the major suppliers of baby milks in Ireland in 2013 as Danone, Pfizer,[43] and Hipp. In 2012 the total demand was worth 22.3 million euro and retail sales were entirely attributed to branded products. Danone, which produces Aptamil and Cow & Gate controls 68% of the market. Pfizer's key subsidiary is SMA Nutrition with the brands Progess, Promil, Promiss, SMA Gold, and SMA White, controls 26.3% of the market. Hipp's major brand is Hipp Organic controlling 2.6% of the market, while all other companies combined have 3.1% of the market. Branding is clearly very important in this sector.

Breastfeeding preterm infants

Babies are considered preterm if they are born before 37 weeks gestation, and in 2011 5.8% of all live births were preterm in Ireland.[44] Preterm babies are considered higher risk for a range of immediate as well as long-term threats to their health and development including the risk of physical, learning and sensory disability. In the immediate post-partum period, many preterm infants are cared for in NICUs where clinical management aims to support growth and development as well as minimise the risk of conditions associated with prematurity including necrotising enterocolitis and sepsis. Breast milk is particularly important to preterm infants, offering protective advantage to the preterm infants' immune response and offering improved outcomes compared to formula milk with regard to necrotizing enterocolitis (NEC).

[43] The Food for Thought report lists Pfizer, however the sale of the infant food unit of Pfizer to Nestle was due in 2012/2013, [Accessed 24 October 2013]
The Nestle press release from December 2012: http://www.nestle.com/asset-library/documents/media/press-release/2012-december/01122012_press_release_en.pdf [Accessed 24 October 2013]
[44] Economic and Social Research Institute (2012). *Perinatal Statistics Report 2011.* http://www.esri.ie/__uuid/7fa4fb8b-3ddc-4a4e-ba97-cfa2a2bfc8ec/Perinatal-Statistics-Report-2011.pdf [Accessed 25 October 2013].

Designating NICUs as Baby-Friendly has been shown to provide improvements in breastfeeding initiation and duration (Parker et al, 2013).[45]

Initiating and supporting breastfeeding for these vulnerable infants can be associated with additional challenges. Preterm birth occurs more frequently among women from lower socioeconomic groups – a cohort considered less likely to breastfeed. The combination of elevated risk for health problems and potentially being born into a disadvantaged community setting, places preterm babies among the children who would benefit most from breastfeeding. Mothers of preterm infants are more likely to have experienced additional stresses at delivery of a physical and emotional nature – there is suggestive evidence that caesarean section may be associated with lower levels of breastfeeding initiation (Ayton et al, 2012). In addition, opportunities for prolonged skin-to-skin contact and putting the baby to the breast may be limited or impossible where an infant requires intensive respiratory support. Prioritising breastfeeding within NICUs can be challenging for staff who are often dealing with a significant number of critical concerns and where a high level of expertise and skills in breastfeeding support is consistently required on a round-the-clock basis.

Factors for making the transition to breastfeeding the preterm infant successful include: if expectations about the transition are realistic, if the individual has adequate breastfeeding experience prior to discharge, and maternal confidence and patience (Sweet, 2008; Bonnie Ronan, 2013). Developing breastfeeding peer counsellors as direct lactation care providers in NICUs has also been shown to be effective in increasing initiation (Meier et al, 2013).

Expressing can be a useful way to provide breast milk to neonates as they can have difficult latching on, may require nutritional supplementation, and may not be able to cope with the volume of milk at the breast. However a Cochrane systematic review (Flint et al, 2007) could not recommend cup feeding over bottle feeding as a supplement to breastfeeding as it was found to confer no significant benefits in maintaining breastfeeding beyond hospital discharge and carries the consequence of a longer stay in hospital.

[45] An expert group convened to produce guiding principles for extending Baby-Friendly practices into neonatal wards (see Nyqvist et al, 2011; Nyqvist et al, 2013).

Jones et al (2013) offer practical advice to manage slow growth in preterm infants fed on human milk including:

- Offering the breast with the best flow first or using a preterm nipple shield to provide a rigid structure and container device for the preterm infant.
- Expressing from the breast that is not in use to trigger milk ejection reflex, and leaving shorter times between expressing for a better fat content.
- Preterm infants should be fed on the hind milk; the fat rich milk obtained towards the end of a milk expression period.

This highly specific information on most recent good practice requires nurses to become ward research specialists for up-to-date knowledge translation (Westbury et al, 2013) and this knowledge must be accurate and consistent across all professionals in contact with mothers (Wallace et al, 2013) facilitating time so that mothers do not feel rushed (Strong, 2013). Strong (2013) appreciates the lack of time available for nurses, and offers alternative methods of helping mothers to reduce the pressure on nurses such as small patient group instruction, use of peer support groups, creating out-of-hour hotlines for lactation support, and creating breastfeeding champions. Barbas (2013) outlines a programme for milk technicians; people to look after expressed milk in neonatal wards to free nurses of this burden. Small changes can lead to significant improvements; Smith and Embleton (2013) note the effectiveness of a rapid quality improvement intervention in a neonatal unit increasing initiation rates from 76% to 90% and outline a range of potentially better practices in the neonatal unit (see Table 6.4).

Table 6.4: A range of potentially better practices in neonatal units (Smith and Embleton, 2013:151)

- Ante-natal ward visits to offer information to mothers who were likely to have a baby admitted to the NICU
- Visiting all mothers as soon as possible following delivery to discuss feeding choices
- Full supervision of first expressing session to assess technique and ensure correct information giving
- Continued maternal support for first 14 days and as required thereafter
- Using colostrum or EBM for mouth care/oral hygiene (whether or not enterally fed)
- Altering unit guidelines so that the default position was to give all preterm babies EBM as soon as it was available (often within the first 12-24 h) unless the attending medical team specifically placed a baby ‘nil by mouth’
- Changing unit guidelines and procedures to improve the amount of time mothers could spend providing kangaroo care
- Improving NICU and postnatal staff training that coincided with hospital

implementation of UNICEF Baby Friendly Initiative Stage 1

- Including UNICEF training on breast feeding and lactation for new medical staff at induction
- Securing additional funding for breast pumps, considering other unit factors (e.g. screens to support expression at the cot side, or supporting mothers to express at the cot side without screens if they wished), and improving facilities and information in the breastfeeding rooms.

Donor milk

Smith and Embleton (2013) note that donor milk is not ideal; the possibility of contamination is low but still a risk and milk treatment may lead to nutrient depletion, however donor milk banks are becoming more common to serve the needs of preterm infants and offer the add-on benefit of being promoters of breastfeeding (Utrera Torres et al, 2010).

In Ireland, an all-island Human Milk Bank has been in operation since 2001 and provides breast milk to neonatal units in hospitals across the island of Ireland. The National Institute for Health and Clinical Excellence guidance on the operation of donor breast milk banks was published in 2010 and was adopted by the all-island milk bank (NICE, 2010).

6.6 Key points

- Higher self-efficacy, positive attitudes towards breastfeeding and determination to breastfeed are strongly related to breastfeeding intent, initiation and duration. However, negative perceptions of breastfeeding including significant embarrassment issues, even within the maternity hospital setting, remain a feature of studies of mothers in Ireland.

- The determinants of breastfeeding in Ireland are broadly similar to those observed in international studies. Breastfeeding initiation is associated with a higher maternal age, and higher levels of education and socioeconomic status and non-Irish ethnicity.

- Infant feeding decisions occur in the context of a range of family, peer, cultural, health service and commercial influences. Breastfeeding initiation in Ireland remains low by international standards. Most infant feeding decisions are formed during or before pregnancy or based on previous infant feeding experience. There is incomplete evidence on how to positively influence breastfeeding intent but appropriate antenatal discussion of infant feeding intentions that incorporates the family can be effective, as is peer counselling. The impact of media campaigns to increase public acceptability and influence breastfeeding intent is unknown. There is some suggestive evidence that provision of breastfeeding facilities is important for some women.

- Motivators to breastfeed for women in Ireland include health benefits, convenience, and bonding. When at-breast feeding or hand expressing is not acceptable to the mother, providing access to breast pumps may help to encourage breast milk feeding. The opportunity to use expressed breast milk may be important to adolescent mothers. Cost of breast milk pumps as well as skills in their use appear to be significant factors.

- Barriers to continued breastfeeding among women in Ireland have been identified as factors such as poor latch, nipple pain, perceived insufficient milk supply, fatigue, lack of freedom, and return to work. Early weaning remains a common feature of infant feeding patterns in Ireland.

- For the, albeit small, proportion of women still breastfeeding at six months in Ireland returning to work was a significant factor in stopping breastfeeding. Corporate

lactation programmes appear promising but are not a feature of the Irish workplace. Evidence is lacking in the literature on both current practice with breastfeeding at work in Ireland and the effectiveness of interventions in this setting.

- Tailored face-to-face support for breastfeeding appears to be more successful than a problem-response/reactive model. Telephone or electronic support is useful for women who are already breastfeeding, but small groups/individual support provided by peers or professionals that is face-to-face appears to offer the best results to support initiation and sustain breastfeeding. Community based peer support approaches appear to be useful in the context of low income communities.

- Evidence from systematic reviews shows that breastfeeding support works for continuation of any and exclusive breastfeeding where it provides consistent information provided by appropriately trained and supported health professionals and/or peer counsellors. Enhanced training and continued education is associated with enhanced outcomes for breastfeeding initiation and duration.

- Perceptions of the value of breast milk substitutes can influence infant feeding decisions. Evidence supports a negative effect on breastfeeding from discharge information packs containing materials produced by infant formula companies. The wider influence of marketing breast milk substitutes and other strategies on infant feeding decisions made by families in Ireland is not yet fully understood.

- Striking the balance between support and pressure can be challenging in terms of national messaging and directly at the health service interface with families. Incremental goal-setting may be useful.

- International studies confirm the effectiveness of the BFHI as an important evidence-based approach to supporting the establishment of breastfeeding in the early postpartum period. Support for the establishment of appropriate techniques and positioning in the maternity hospital setting is critical and should encompass aspects of supporting women to deal with postpartum fatigue and interpret their own milk supply appropriately. All BFHI steps are important, but steps 4, 6 and 9 appear to be critical. Extension of Baby Friendly approaches to the community appears promising.

- Supporting breastfeeding for preterm infants is of particular importance. Extending BFHI to NICUs is an approach with proven effectiveness. A number of interventions have been shown to be effective in both supporting preterm babies to access breast milk and in ensuring the breast milk is best suited to their needs. Quality improvement interventions in neonatal units can improve breastfeeding rates.

Chapter 7. Recommendations

Make breastfeeding everyone's business

Revise the national governance structures relating to the implementation and monitoring of the Strategic Action Plan.

Position breastfeeding within a wider early years framework that is integrated with government nutrition, maternity and family/parenting policies and frameworks.

Agree a new action plan to progress breastfeeding in Ireland within the *Healthy Ireland* framework and across HSE health promotion, primary care and hospital divisions as well as within non-HSE community and voluntary structures.

Agree a reporting mechanism for progress on breastfeeding that reports to the HSE leadership team and the management committee (MAC) level within DoH and DCYA.

Use a logic model approach to development of the new action plan which specifies indicators and a monitoring and evaluation framework.

Integrate tackling inequalities as a core theme of all actions within the new action plan and define a core set of target groups.

Gender proof any future infant feeding strategies in line with best practice in gender mainstreaming.

Establish a structure to support cross-departmental collaboration among DoH, DCYA and the Department of Education and Skills in the first instance, with a view to inclusion of other relevant departments over time.

Establish collaboration across HSE, and other, leaderships as a key population health priority delivered in context of the *Healthy Ireland* framework.

Develop and resource clearly defined working groups to deliver strategic, implementation and monitoring functions.

Define actions at national, regional and local levels.

Appoint two assistant national breastfeeding coordinators with assigned leadership in primary care and acute hospitals divisions.

Submit a business case for the appointment of regional breastfeeding coordinators in line with the level of provision operating in Northern Ireland.

Develop a 'family panel' to support the integration of the experiences and views of expectant and new mothers and their families into policy development on an ongoing basis.

Adopt breastfeeding skilled support as a component of those health services that will be free at point of access as part of government plans for universal health care/health insurance. Services should be staffed with personnel with the appropriate skills and with free, convenient access to more specialist services if needed.

Make health information systems fit for purpose

Develop detailed profiles of infant feeding patterns at discharge from hospital/48 hours by region, hospital group, and individual hospital to support regional and local action.

Include breastfeeding on discharge from hospital/48 hours and level of compliance with the HSE Infant Feeding Policy as HSE performance indicators.

Include ethnicity and nationality within NPRS to assess the infant feeding decisions of second generation migrants.

Conduct a five yearly Infant Feeding Survey to provide nationally representative data.

Progress the development of a child health information system as a matter of urgency.

Monitor public attitudes to infant feeding through the inclusion of defined questions within periodic national surveys of attitudes and behaviours.

Develop strategic research on infant feeding in Ireland

Commission a health economics assessment of infant feeding in Ireland based on the health economics assessment conducted in the UK (UNICEF, 2012).

Establish an all-island breastfeeding research network.

Support research on the long-term outcomes of infant feeding decisions on child health and development through analysis of longitudinal studies.

Commission qualitative research on the impact of marketing of breast milk substitutes on infant feeding decisions and perceptions among a representative sample of families and health workers in Ireland.

Develop research to better understand the infant feeding culture and decisions of ethnic minority groups in Ireland with a view to informing policy to protect breastfeeding in the future.

Ensure research is published and disseminated widely to contribute to the evidence-base.

Enhance evaluation and quality control of services

Develop an evaluation framework for key services supporting breastfeeding in primary care, voluntary services and maternity services.

Conduct an evaluation of the implementation and impact of the HSE Infant Feeding Policy for Maternity Services.

Integrate breastfeeding service outputs into the National Standards for Better Safer Healthcare and health service audit processes.

Assess practice in breastfeeding support in neonatal intensive care settings including the use of donor breast milk.

Commission a comprehensive external evaluation of the BFHI in Ireland.

Invest in evidence-based service structures

Develop a clear regional HSE commissioning framework for breastfeeding promotion and support services. This should include, at a minimum, a full time lactation consultant (IBCLC)/clinical specialist within all Irish maternity hospitals and paediatric hospitals and according to a determined births-to-support staff ratio.

Develop a clear referral framework at community level for mothers seeking additional breastfeeding support before and after birth.

Roll-out a primary care programme based on the pilot within the HSE Primary Care Programme and ensure breastfeeding support services are an identified function of primary care teams.

Publish annual reports from the HSE Section 39 grant aided agencies on the level and nature of activities undertaken.

Provide access to breast pumps to all mothers of preterm and hospitalised infants.

Define services and supports routinely expected from various members of the health care team, including roles of volunteer mother-to-mother/peer supporters.

Value, support and develop the workforce

Organise annual breastfeeding study day(s) within each HSE region to facilitate sharing of information between policy, services and researchers.

Invest in training and skills development for breastfeeding support across a range of service providers and ensure training records are regularly submitted as part of compliance with the HSE Infant Feeding Policy for Maternity Services.

Provide training at undergraduate and postgraduate level across relevant disciplines.

Ensure that effective breastfeeding support is integrated into all aspects of the development of the proposed National Children's Hospital.

Renew the approach on Ireland's infant feeding culture

Develop a media campaign that promotes breastfeeding in Ireland among families, based upon findings from Irish research and linked to current activities such as National Breastfeeding Week.

Assess the impact of the 'breastfeeding welcome here' scheme operating in Northern Ireland and review the appropriateness of extension to Ireland. Women in Ireland may have a preference for general acceptability of breastfeeding in public, however a move towards this acceptability must start somewhere.

Involve wider perspectives from non-health service disciplines in a working group to develop a structured approach to culture change.

Agree and implement an approach to protect the breastfeeding culture of new communities in Ireland.

Monitor experiences of discrimination relating to breastfeeding out and about for all women by integrating this with established surveys on other aspects of discrimination.

Protect breastfeeding by managing commercial interests

Establish a baseline for practice in supporting breastfeeding in the workplace through integration of appropriate questions in labour force/household/ health and safety surveys and review this on a periodic basis.

Support the development of the Baby Feeding Law Group Ireland and task them with providing key recommendations on how to better protect parents, health workers and other relevant stakeholders from inappropriate marketing of breast milk substitutes in Ireland.

Encourage professional associations, organisations, faculties and societies to include full compliance with the International Code of Marketing of Breast Milk Substitutes and subsequent World Health Assembly (WHA) resolutions, within their codes of conduct/ethics.

Conduct a periodic external review of the compliance of the HSE, its contracted services and grant-aided organisations with the International Code of Marketing of Breast Milk Substitutes and subsequent WHA resolutions.

Liaise with all government departments to raise awareness of the need for policies and practices relating to the marketing of infant formula at all stages of development to comply fully with the International Code of Marketing of Breast Milk Substitutes and subsequent WHA resolutions.

Ensure that practice in exporting and marketing of milk products in Ireland complies with the International Code of Marketing of Breast Milk Substitutes and subsequent WHA resolutions.

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Appendices

Appendix 1

Key findings from the *Interim Report of the National Committee on Breastfeeding* (Health Promotion Unit, Department of Health and Children, 2003)

- The terms of reference of the committee were to review the 1994 *National Breastfeeding Policy* and identify recommendations not yet implemented, identify those organisations charged with responsibility for implementation and to engage with such organisations to establish commitment and advise on best practice. In addition, the committee were tasked with providing recommendations to the Minister for Health and Children on what further action was required at national, regional and local level to improve and sustain breastfeeding rates. The interim report was also intended to identify other relevant areas requiring support and recommend measures for their implementation.

- The report noted that the targets for breastfeeding initiation rate was below the 1994 policy target of 50% for achievement by the year 2000.

- Regional breastfeeding surveys were conducted by some health boards to inform the interim report. These estimated a breastfeeding initiation rate of around 34% with 10 - 13% of mothers breastfeeding at four months. In the Mid-Western Health Board it was noted that over half of both breastfeeding and formula-feeding mothers had made their infant feeding decision prior to the birth. In the North-Western Health Board it was noted that half of all respondents who ceased breastfeeding at six to twelve weeks would have liked to continue for longer.

- The interim report identified concerns with data collection and recommended a programme of quality improvement for data on breastfeeding duration including appropriate linkage to denominator data and national performance indicators.

- At the time of the interim report, of the 22 maternity hospitals in Ireland, 18 had a breastfeeding policy, 9 had a clinical midwife specialist in breastfeeding, 19 were

participating in BFHI but no Irish maternity hospital had yet achieved Baby Friendly status. Few hospitals were auditing their policies and practice.

- Improvements were identified in (i) breastfeeding education within some but not all health professional disciplines (ii) the development of regional and local breastfeeding policies (iii) better cooperation between statutory and voluntary sectors (iv) the maternity hospital setting and establishment of the BFHI (v) enhanced understanding and compliance towards the International Code of Marketing of Breast Milk Substitutes, particularly with regard to discharge packs and free formula (vi) extension of maternity leave.

- Progress outside the health sector was considered to be 'disappointing' with the following areas identified as problematic (i) progressing breastfeeding support at community care area level (ii) information on infant feeding within the school education system (iii) positive media portrayal of breastfeeding (iv) positive attitudes and a cultural acceptance of breastfeeding.

- Assessment of progress in many areas was hampered by a lack of nationally representative data, particularly with regard to potential experiences of discrimination for breastfeeding mothers in public and with regard to practice on breastfeeding support in the workplace.

- The interim report concluded that "*no strategic approach was taken toward achieving the targets and recommendations contained in the 1994 policy…there was no designated body to drive policy initiatives forward to implementation*". The positive impact of the 1994 policy was seen "*most forcibly within the health sector … major cultural and societal shifts in favour of breastfeeding take longer to establish"*. The interim report recommended that "*support needs to come from all sectors of government and all areas of public life in order to re-establish breastfeeding as the universally accepted natural progression following birth"*.

Appendix 2

Summary of data collected on breastfeeding in Ireland 2005-2012

Target/Source		*National Perinatal Reporting System*	*Child Health Performance Indicators*	*Growing up in Ireland study Infant cohort*	*Infant Feeding Survey*
National breastfeeding rate at 48hrs/discharge		Y	N (Since 2011)	Y	Y
Breastfeeding rate at 48hrs/discharge by socioeconomic group		Y	N	Y	Y
Breastfeeding rate at 48hrs/discharge by maternity/hospital unit level		Y	N	Y	Y
National breastfeeding rate at 3-4 months		N	Y (incomplete)	Y (Wave 1)	Y
Breastfeeding rate at 3-4 months by socioeconomic group		N	N	Y	Y
Breastfeeding rate at 3-4 months by HSE Local Health Office		N	Y (incomplete)	N	Y
National breastfeeding rate at 6 months		N	N	Y (Wave 1)	Y
Breastfeeding rate at 6 months by socioeconomic group		N	N	Y	Y
Breastfeeding rate at 6 months by HSE Local Health Office		N	N	N	Y
National breastfeeding rate at one year		N	N	Y (Wave 2)	N
Breastfeeding rate at one year by socioeconomic group		N	N	Y (Wave 2)	N
Breastfeeding rate at one year by HSE Local Health Office		N	N	N	N
Demographic (maternal)	Socioeconomic status	Y	N	Y	Y
	Age	Y	N	Y	Y
	Parity	Y	N	Y	Y
	Marital status	Y	N	Y	Y
	Nationality	Y	N	Y	Y
Infant	Singleton/ multiple	Y	N	Y	Y
Health service	Type of antenatal care	Y	N	Y	Y
	Place of birth	Y	N	Y	Y
	Date of booking	Y	N	Y	N
	Method of delivery	Y	N	Y	Y
	Length of hospital stay	Y	N	Y	Y
Clinical	Prematurity	Y	N	Y	Y
	Maternal disease/illness	Y	N	Y	N
	Infant disease/ congenital malformation	Y	N	Y	Y
	Early neonatal death	Y	N	N	N
Other	Availability of breastfeeding support	N	N	N	Y
	Type of breastfeeding	N	N	N	Y

	support				
	Intention to breastfeed	N	N	Y	Y
	Breastfeeding self-efficacy	N	N	N	Y
	Attendance at antenatal class	N	N	N	Y
	Reason for stopping	N	N	Y	Y

Data available in published reports

Variable/System		*Perinatal Statistics Reports 2005-2012*	*Growing up in Ireland study Infant cohort*
Feeding category	*Breastfed exclusively*	Y	Y
	Partially breastfed	Y	Y
	Artificially fed	Y	Y
Age	*On discharge/48 hrs*	Y	Y
	3-4 months	NA	Y
	6 months	NA	Y
	1 year	NA	Y (Wave 2)
	2 years	NA	Y (Wave 2)
	3 years	NA	Y (Wave 2)
Demographic (maternal)	*Socioeconomic status*	Y	Y
	Age	Y	Y
	Parity	Y	Y
	Marital status	Y	Y
	Nationality	Y	Y
Infant	*Singleton/ multiple*	Y	Y
Health service	*Type of antenatal care*	Y	Y
	Place of birth	Y	Y
	Date of booking	Y	Y
	Method of delivery	Y	Y
	Length of hospital stay	Y	Y
Clinical	*Prematurity*	Y	Y
	Maternal disease/illness	N	Y
	Infant disease/ congenital malformation	N	Y
	Early neonatal death	Y	N
Other	*Availability of breastfeeding support*	NA	N
	Type of breastfeeding support	NA	N
	Intention to breastfeed	NA	Y
	Breastfeeding self-efficacy	NA	N
	Attendance at antenatal class	NA	N
	Reason for stopping breastfeeding	NA	Y

Appendix 3

Social classification and socioeconomic groups across the datasets

Breastfeeding review report	*Growing Up in Ireland*[46]	*NPRS: (Based on CSO 1991 social classification)*	*Infant Feeding Survey: (Based on CSO 2006 social classification)*	*CSO socioeconomic groups (current)*
SEG 1 & 2 *Professional:* Higher professional; Lower professional; Employers and managers; Salaried employees SEG 3 & 4 *Non-manual and manual skilled:* Intermediate non-manual workers; Other non-manual workers; Skilled manual workers SEG 5 & 6 *Semi-skilled and unskilled:* Semi-skilled manual workers; Unskilled manual workers *Others:* Farmers and farm mangers; Other agricultural occupations and fishermen; Home duties: Home duties Unemployed: Unemployed *Not known*: Not classifiable; Not stated	I Professional/ managerial II Other non-manual/ skilled manual III Semi-skilled/ unskilled manual All others gainfully occupied Never worked	Farmers & Farm Managers Other Agricultural occupations & Fishermen Higher Professional Lower Professional Employers & Managers Salaried Employees Intermediate Non-Manual Workers Other Non-Manual Workers Skilled Manual Workers Semi-Skilled Manual Workers Unskilled Manual Workers Other	Professional workers Managerial and technical Non manual Skilled manual Semi-skilled Unskilled All others gainfully occupied and unknown Student Unemployed	A Employers and managers B Higher professionals C Lower professionals D Non manual E Manual skilled F Semi-skilled G Unskilled H Own account workers I Farmers J Agricultural workers Z All others gainfully occupied and unknown

[46] Based on household social class; recorded as P1 & P2, highest social class is attributed to household

Appendix 4

Overview of progress action goals and objectives as outlined in the Strategic Action Plan

Code:

Complete - C

Progressing - P

Not complete - NC

Could not be measured - CM

GOAL 1 - All families have the knowledge, skills and support to make and carry out informed infant feeding decisions, particularly those least likely to breastfeed.

Objective 1.1 The individual and family needs for breastfeeding information, support and protection are identified and addressed.

No	Action	Expected outcome	Outputs/comments	Code
1.1 (1)	The pre-conception and antenatal needs of families for optimum breastfeeding information, support and protection will be addressed.	Parents are being encouraged to breastfeed exclusively for the first six months and to continue breastfeeding thereafter in combination with nutritious and safe complementary food for up to two years and beyond.	DoH and HSE Policy. Included in HSE Infant Feeding Policy for Maternity and Neonatal services, information resources & websites, training to PHNs HSE Dietitians & through BFHI.	P

		Best evidence-based information and support is being provided by the most effective methods identified in ongoing research and is consistently available from all statutory and voluntary providers of maternity services.	The BFHI and Infant Feeding Policy for Maternity & Neonatal Services are based on international evidence based practice. BFHI assesses evidence based information and support provided to service users. Practice in all settings needs to be evaluated	P
		In providing infant feeding information due account is taken of the individual perspectives of parents planning a pregnancy or already pregnant.	No clear indicator to measure progress in relation to taking account of individual perspectives.	CM
		Guidelines on the optimum provision of information on infant feeding have been developed for statutory, non-statutory and voluntary providers of antenatal education to parents.	Guidelines developed by BFHI. Antenatal checklists included in the new National Maternity Charts and provided by BFHI. Antenatal teaching packs were distributed to statutory and voluntary providers	P
		Creating awareness of the importance of breastfeeding and the risks of not breastfeeding to the health of mothers and babies has been incorporated as the core aspect in all information on infant feeding.	This information has been incorporated in breastfeeding information leaflets. Not routinely represented in information presented on use of infant formula.	P
		The antenatal nutritional status of women is being assessed in relation to its effect on their infants' health.	Practice is unclear. Unclear whether this relates to epidemiological surveillance also. National Obesity project has developed guidelines on weight management in pregnancy.	P

		The current and projected infant feeding support needs of mothers are being assessed during the antenatal period.	Antenatal discussion includes the provision of information on supports. If there are concerns or a previous poor experience a discussion with a lactation consultant CMS or voluntary supporter to be arranged. Practice needs to be evaluated.	P
		Confidence building in overcoming real and/or perceived barriers to breastfeeding is being included in antenatal care and education programmes.	Several maternity units have developed antentatal skills workshops that take this factor into account. Some examples of enhanced antenatal skills workshop in Portiuncula, Rotunda and Cavan hospitals.	P
1.1. (2)	Hospital/community and volunteer breastfeeding support programmes will provide a seamless, timely, coordinated, consistent, and comprehensive service to all mothers.	Using evidence- based practices; parents are receiving timely and consistent breastfeeding support from health professionals in the hospital and from community statutory and voluntary services.	BFHI assessments and self-appraisals measure this in hospitals The BFHI and Infant Feeding Policy for Maternity Services are based on international evidence based best practice. Data on timing of visits within a 48 period is recorded. Breastfeeding support groups have increased to 215 groups countrywide.	P
		Expectant and new mothers are being provided with information on evidence-based healthcare practices that promote the successful initiation and continuation of breastfeeding and can therefore confidently expect and/or request these practices from the maternity and child care services.	The provision of information on supportive birth practices forms part of the BFHI and Infant Feeding Policy for Maternity services. HSE Infant Feeding policy on www.breastfeeding.ie.; BFHI link has handout on what to expect from supportive hospital No evidence of whether information needs are met and no pre- and post- strategy data on this	P

		The availability of statutory support services has been extended to offer a seven-day per week service.	Not achieved A review of current community breastfeeding support services has been undertaken. PHN visits are provided over the weekend in a number of community care areas around the country, to provide support to mothers within 48 hours of discharge. Staff shortages have been a barrier to the continuation of this service.	NC
		Evidence based standards have been set for the effective facilitation of community breastfeeding support groups.	Not achieved but evidence of progress in skills development	P
1.1. (3)	Voluntary breastfeeding support services will be strengthened and augmented.	Mother-to-mother support groups, particularly La Leche League of Ireland and Cuidiú Irish Childbirth Trust, are being helped to sustain and develop their services.	Support group provided by voluntary groups are supported through grant agreements with the HSE, including training for LLL Leaders and Cuidiú Counsellors. Significant growth in number and capacity of operating support services.	C
		Extra provisions are being made for the expansion of these groups to areas where this service is not currently available, in accordance with the recommendations in the White Paper on supporting voluntary activity and subsequent guidelines.	Opportunities for the expansion of these services are included in current grant aid agreements. Expansion has occurred on an organic basis depending on location of voluntary leaders Community mother/parenting programmes in counties Tipperary and Dublin have breastfeeding support programmes	P
1.1. (4)	Comprehensive and timely information will be provided for families on how and where to access statutory and voluntary breastfeeding information and support services.	Up-to-date information has been provided on local health service support networks and other statutory, non-statutory and voluntary breastfeeding support services to local families and communities.	Online and leaflet resources are provided including a centralised database of available support services. Up to date information is provided through the website www.breastfeeding.ie At HSE area level information on locally based support groups is provided by local statutory and voluntary service providers.	C

1.1. (5)	Priority will be given to identifying and actively addressing the particular needs of families in society that are less likely to breastfeed or inappropriately breastfeed including mothers with previous difficult and/or unsuccessful breastfeeding experiences.	Priority is being given to addressing the infant feeding information and support needs of these families and individuals.	No clear indicator to measure progress. Examples of specific programmes in some areas, for example Antenatal session in Youthreach programme in Limerick; Limerick social service programme for young single mothers that incorporates breastfeeding.	P
		Research has been undertaken to identify the support needs and barriers to breastfeeding for these families and individuals.	Research on Barriers to Breastfeeding for individuals, families and communities with low breastfeeding rates conducted by UCD in 2010, commissioned by the HSE. Breastfeeding among some vulnerable groups better understood through research including Infant Feeding Survey 2008, GUI and other studies.	C
		Based on this research, models of antenatal infant feeding education and postnatal support initiatives have been developed to meet the specific needs of these families.	Little evidence of translation into targeted approaches beyond teenage mothers. Breastfeeding support integrated into some programmes in the Prevention and Early Intervention Initiative	P
		A pilot peer support project has been put in place to address the identified needs and barriers to breastfeeding within these families.	Community mothers' programmes provide support in some locations around the country. A peer support programme 'Breastfeeding Buddy scheme' has been piloted by Friends of Breastfeeding in South West Dublin.	NC

Objective 1.2 The needs of partners, grandparents and the extended families of expectant and newly breastfeeding mothers are identified and addressed.

No	Action	Expected outcome	Outputs/comments	Code
1.2. (6)	The breastfeeding information and support needs of partners, grandparents and the extended families of women intending to or who are breastfeeding, will be addressed.	The support and information needs of these family members have been identified and based on these, materials or other interventions that portray breastfeeding as a positive and fulfilling experience have been developed.	No strategy led research on needs of family members Research on needs of fathers conducted in Sligo and Limerick Families Supporting Breastfeeding resources and BFHI materials for fathers and families members developed.	NC
		Face-to-face information sessions are routinely being provided to partners, grandparents and extended family members of expectant mothers by statutory and non-statutory maternity care services and voluntary organisations.	Not standard care and not in the HSE Infant Feeding Policy for Maternity Services. May be happening on an ad hoc basis. No service descriptions or evaluations Fathers only sessions at LLL conference every year Most antenatal classes women can bring a partner – father, granny whoever they wish	NC

Objective 1.3 New mothers are empowered and enabled to breastfeed for as long as they wish.

No	Action	Expected outcome	Outputs/comments	Code
1.3. (7)	Mothers will be facilitated and empowered to breastfeed for as long as they wish.	Expectant mothers are being encouraged by health workers to avail of breastfeeding information and support services prior to giving birth.	No data on practice pre- or post-strategy. No clear indicator to measure progress included in antenatal classes Information materials and website content on support services countrywide. Infant Feeding checklist in maternity charts detail information to be provided through one to one discussions prior to 32 weeks gestation. This includes encouraging women to attend breastfeeding support groups in pregnancy.	P
		Expectant parents and new parents are being made aware of the difficulties that sometimes arise in getting	Information on addressing potential challenges and support services are included in	P

		breastfeeding established and are given support and reassurance on how to overcome these.	information resources and website www.breastfeeding.ie The Infant Feeding Policy for Maternity Services incorporates provision of assistance and support to mothers which is proactive, including recognising feeding cues and if feeding is effective. Practice needs to be evaluated. PHNs carry out a breastfeeding assessment at first PHN visit, which will enable early identification and management of any potential problems and to assist mothers to check if her baby is feeding effectively, La Leche League and Cuidiu provide telephone as well as group support.	
		After giving birth newly breastfeeding mothers are being encouraged to access support services as early as possible and as often as necessary, especially if any problems are being encountered.	Component of HSE Infant Feeding Policy for Maternity Services. Not data on pre- and post-strategy practice.	P
		One-to-one support is routinely being provided by trained health care workers, in the hospital and community healthcare settings.	Component of HSE Infant Feeding Policy for Maternity Services. No data on pre- and post-strategy practice. Limited coverage of specialised breastfeeding support staff is an issue.	P
		Parents are being made aware of their rights and the provisions in place in workplaces and public areas to facilitate the continuation of breastfeeding.	Leaflets on workplace rights have been produced and information is included on www.breastfeeding.ie. No evidence on dissemination or current workplace practices.	P
		In consultation with breastfeeding parents the	National Breastfeeding Week. Limited	C

		barriers to normalising breastfeeding are being addressed in public awareness campaigns and other initiatives supporting the continuation of breastfeeding.	integration of breastfeeding into public health messaging on obesity, infectious disease, breast cancer etc.	

GOAL 2 - The health sector takes responsibility for developing and implementing evidence best breastfeeding policies and best practice.

Objective 2.1 Evidence-based policies and best practice related to breastfeeding are identified and disseminated throughout the healthcare system.

No	Action	Expected outcome	Outputs/comments	Code
2.1. (8)	Relevant health service providers will implement national, regional & local evidence-based breastfeeding policies based on the Strategic Action Plan for Breastfeeding in Ireland.	Local and regional policies are being developed, up-dated and audited regularly in line with the current Strategic Action Plan for Breastfeeding in Ireland.	HSE Infant Feeding Policy for Maternity Services was developed. No audit of policy implementation as yet. 8 Baby Friendly Hospitals have been audited and assessed. The Breastfeeding Policy for PCTs and Community Healthcare settings has been piloted in 2 areas and evaluated.	P
		Commitment has been given by the health services professional managerial and policy-making bodies to implement the Strategic Action Plan for Breastfeeding in Ireland.	Commitment demonstrated by some services through participation on National Breastfeeding Strategy Implementation Committee, and increased provision of supports and practices in some areas	P
		National, regional and local breastfeeding policies are being communicated to all existing staff.	The HSE Infant Feeding Policy for Maternity Services is now the overarching policy for Maternity units, and it is a national PPPG. Unclear degree to which it is communicated to all staff. Eight baby friendly hospitals have been assessed as implementing it The Policy is communicated through training courses and in-service breastfeeding programmes	CM
		Local and regional breastfeeding targets are being set in line with the Strategic Action Plan for Breastfeeding in Ireland.	No regional or local targets have been set – lack of suitable data may be primary issue. Some hospitals set targets to increase rates by 2% per year and monitor.	NC

2.1. (9)	Health service providers will protect breastfeeding in line with the WHO International Code of Marketing of Breast Milk Substitutes and subsequent relevant WHA Resolutions.	Health service policies prohibit the distribution of materials produced by companies marketing products within the scope of the International Code in health care institutions and by health care staff.	Component of HSE Infant Feeding Policy for Maternity Services and participation in BFHI. No audit of practice has occurred, no defined system to capture violations of code within the health system. Eight baby friendly hospitals have been assessed as implementing Code	P
2.1. (10)	The health services will prioritise research on breastfeeding in line with information gaps identified and independent of competing and commercial interests.	Gaps in information and research have been identified.	This review provides overview of data gaps. No strategic overview of research priorities aligned to plan. Bibliography prepared by NUIG and included on www.breastfeeding.ie Paper on gaps included in NIHS Research Bulletin 44, 2008	P
		Commitment to fund research priorities has been received to ensure that clinical practice conforms to best evidence based requirements.	No defined research fund for breastfeeding linked to strategic action plan. Research commissioned as part of Strategy implementation included TCD Infant Feeding Survey and UCD Study on Barriers to Breastfeeding for those least likely to breastfeed. HRB has funded research related to best practice of breastfeeding	NC
		Exchange of knowledge in breastfeeding research is being supported within Ireland and internationally.	No breastfeeding research network in Ireland. International linkages facilitated by NGO sector in the main. BFHI is exchanging knowledge through the NIHS	P

2.1. (11)	A database of Irish infant and young child feeding research evidence will be established.	Database has been developed which includes existing research abstracts; authors' contact details; list of research gaps; and list of projects in progress.	Database of Irish Infant Feeding Research was developed by Health Promotion Research Centre in NUIG in 2008, commissioned by the HSE. and is available on www.breastfeeding.ie This has not been updated. Some Irish Infant Feeding research on lenus.ie; and childrensdatabase.ie	P
		Access to the database has been set up through the Breastfeeding Promotion website	Available in Bibliography section of www.breastfeeding.ie	P
2.1. (12)	The public health nursing service will be adequately supported to meet the needs of breastfeeding mothers in the community	A review of existing breastfeeding support services provided by the public health nursing service has been undertaken.	A review was undertaken in 2009. Some of the findings in this UCC study may provide evidence for other outcomes	C
		Based on this review, the public health nursing service has been provided with the support necessary to offer a comprehensive, timely and effective service to breastfeeding mothers in the community in accordance with best practice.	Unclear – no additional resources have been provided Since the review PHN service is less due to budget constraints Data on timing of provision of first PHN is collated.	NC
2.1. (13)	Supports for mothers and babies with special needs will be enhanced.	The special breastfeeding needs of mothers and young children with disabilities are being addressed.	Limited progress. Support provided by Irish Premature Babies organisation. More SCBUs now provide free sterile bottles for EBM, and access to pumps. Some community PHNs arrange pumps.	NC
		If breastfeeding mothers or their babies require medical treatment in paediatric or general hospitals they are being facilitated to sustain and continue breastfeeding in accordance with BFHI guidelines.	No data on practice in this domain. Pilot programmes in paediatric hospitals were not maintained or mainstreamed. BFHI developed a paediatric initiative but was not progressed due to hospital budget restrictions AMNCH, Tallaght have policies for hospitalised mothers and supports for breastfeeding children. Portiuncula Hospital has hospitalised	CM

			lactating mother policy	
2.1. (14)	Extra supports for breastfeeding will be explored and addressed.	Breast milk pumps are being funded as necessary through the health services, especially to mothers of preterm or ill infants.	There is no standardised practice and it is operated on a discretionary basis between HSE and LHO regions.	P
		A feasibility study has been undertaken to assess the need for a national donor breast milk service.	The all-island Milk Bank has been in operation since 2000.	NC
2.1. (15)	Liaison links will be set up and maintained between statutory and non-statutory hospital and community health services, and voluntary support groups providing maternity and child care.	Liaison processes have been set up to ensure that effective communication occurs between all providers of maternity and child care in order to improve services, maintain standards, increase effectiveness and avoid duplication of services.	Some progress in sharing of information between hospital and community services (see chapter 4). Birth Notification system between hospitals and PHNs includes feeding method No clear framework for coordinating at community level. Some hospitals have community representatives on their maternity committees.	P
		Adequate support is being provided to facilitate this.	Unclear	CM

Objective 2.2 Health workers have the knowledge and skills necessary to protect, promote and support breastfeeding.

No	Action	Expected outcome	Outputs/comments	Code
2.2. (16)	Minimum competency-based standards (relevant to area of work) of breastfeeding knowledge and skills will be established. These will be applied to all relevant health workers with	Updates and ongoing professional breastfeeding skills development have been accepted as essential, particularly for those with primary responsibility for maternity and child health service delivery.	Component of HSE Infant Feeding Policy for Maternity Hospitals. Assessed in BFHI hospitals Midwives and PHN courses have specific breastfeeding sessions.	P

	particular priority given to the skill needs of staff in the frontline maternity and childcare areas.	The curricular content and competency requirements for best evidence-based breastfeeding practice have been developed and form part of all relevant undergraduate, postgraduate and in-service health worker courses.	Significant developments in quality of breastfeeding training for nurses and midwives, less so in other disciplines. A review of the curricular content and competency requirements for pre-service and in-service breastfeeding education has been undertaken. An Education and Training subgroup of the NBSIC has been established. Recommendations have been made for the development of competency based standards	CM
		Clinical skills development has been made integral to these courses.	Unclear Some areas e.g. Limerick and Galway developed clinical skills assessments for midwifery students The 20 hour breastfeeding course and 6 hour updates are accepted as essential for midwives and PHNs	CM
2.2. (17)	Pre-service and in-service training of all relevant health workers will include information on the WHO Code of Marketing of breast Milk substitutes (and allied products).	Health care workers are being made aware of their role/responsibility in implementing the marketing Code and EU Directives and are being facilitated to carry out this role.	Component of HSE Infant Feeding Policy for Maternity Services and BFHI materials raise awareness. No awareness campaign has been operated.	P
		A professional Code of Ethics compatible with the International Code has been drawn up covering the funding of education/research, acceptance of sponsorship and gifts; and disclosures of these, for all relevant health worker groups.	Not progressed. Corporate sponsorship by infant formula companies remains common practice. HSE staff codes of conduct, and many health professional groups have codes which include issues such as acceptance of gifts	NC

2.2. (18)	Breastfeeding policies provide for the support and training needs of health workers to enable them to provide a uniformly high standard of breastfeeding promotion, protection and support.	Breastfeeding coordinators (at least 10 full-time regionally based posts reflecting the population size and geographical spread of the areas to be served) to have been appointed to oversee the implementation of breastfeeding policies; in particular to ensure that the breastfeeding training needs of health workers are being identified and met, and to encourage voluntary, statutory and non-statutory partnerships in breastfeeding education.	Not progressed.	NC
		Staff are being supported to maintain and up-date their breastfeeding knowledge and skills, particularly those with responsibility for in-service training or mentoring.	Component of HSE Infant Feeding Policy for Maternity Services including maintenance of training record. Policy implementation and current practice unclear. In some areas PHNs and midwives have been funded to qualify and maintain IBCLC qualification	P
		Suitably qualified trainers have been identified and supported to provide pre-service and in-service breastfeeding training.	Training of trainers courses held, particularly in north Dublin – at least a dozen PHNs trained and a group in the NW, Limerick and Galway. Most maternity hospitals have trained in-house trainers and some community areas.	P
		Training courses and supporting educational packs have been developed in accordance with best practice and inclusive of appropriate learning outcomes at basic level and at trainer level.	Unclear Some have been developed in conjunction with BFHI	CM

		Service providers are being encouraged to recognise the skills of staff with an IBCLC or equivalent breastfeeding qualifications and staff are being supported to achieve and maintain these qualifications.	Component of HSE Infant Feeding Policy for Maternity Services. Practice is unclear. In some areas PHNs and midwives have been funded to qualify and maintain IBCLC qualification Some hospitals and a small number of community areas have a dedicated IBCLC post	P

Objective 2.3 Relevant healthcare facilities and organisations support and implement the WHO/UNICEF/HPH Baby Friendly Initiative.

No	Action	Expected outcome	Outputs/ comments	
2.3. (19)	All relevant healthcare policy, provider and professional groups and institutions will pursue and support the goal of achieving and maintaining the WHO/UNICEF/HPH "Baby Friendly" designation.	The BFHI criteria for current best practice have been incorporated into all health service breastfeeding policies.	BFHI requires that all maternity hospitals have a policy. The WHO/UNICEF 10 Steps of the BFHI are incorporated into HSE Infant Feeding Policy for Maternity Services & the piloted Breastfeeding Policy for PCTs	C
		The BFHI has been incorporated into hospital/health service accreditation systems.	It was in the progress of being linked when Accreditation ceased. Now in process of being linked into Healthcare Standards. One hospital used it with ISO 9000	P
		Staff members with the appropriate expertise are being identified to spearhead the training and institutional changes required to implement the BFHI.	Not uniformly	P
		The extension of the Baby Friendly Initiative beyond hospital settings is being pursued to include other relevant health settings e.g. community health care settings.	A feasibility study on expanding BFHI to community health services was undertaken and report compiled.	P

2.3. (20)	Adequate support will be given to the coordination, monitoring, assessment and re-assessment processes of the BFHI to provide for the maintenance and expansion of its range of services.	The BFHI is supported to maintain its current activities and the role, scope and resources of the BFHI have been examined to allow for further development and expansion of the Initiative.	Paper published on the difference made to breastfeeding rates by Baby Friendly designation. Initiative supported through funding, place on strategic committee, joint working. Funding is examined each year to allow for development and there has been expansion over the years of the Strategy	C
		Commitments to implement the BFHI are being included in the service plans for all relevant health institutions.	Yes, in some, and to varying degrees. The implementation of the BFHI has been included in more recent HSE Operational plans.	C

GOAL 3 - Communities support and promote breastfeeding to make it the normal and preferred choice for families in Ireland.

Objective 3.1 Support for breastfeeding is fostered in family, friendship and community networks.

No	Action	Expected outcome	Outputs/comments	Code
3.1. (21)	A needs assessment will be carried out to identify local community breastfeeding needs, and any identified gaps in service addressed.	A needs assessment has been carried out in collaboration with the communities involved where not already available.	No community-based needs assessments have been conducted Research on barriers to breastfeeding for individuals, families and communities with particularly low breastfeeding rates was commissioned and undertaken by UCD. A number of recommendations were made.	NC
		Addressing the needs identified has been made a priority for local care providers.	Outstanding recommendations of the UCD report need to be addressed.	NC
		New breastfeeding support services are being developed if needed to respond to the needs identified.	These have developed on an ad hoc/organic basis in the main. New community breastfeeding support services are provided by HSE Public Health Nurses and voluntary breastfeeding organisations.	P

		A database of community groups that support breastfeeding or have potential to support breastfeeding has been made available locally.	Included in leaflets and within national breastfeeding website.	C
3.1. (22)	Local breastfeeding awareness campaigns will be organised to build on and coincide with national breastfeeding week as well as linking breastfeeding promotion with other relevant health promotion activities and strategies.	Local health care workers, statutory and voluntary breastfeeding support groups e.g. LLL and Cuidiú-ICT, schools, workplaces, family and women's groups are being encouraged to work in partnership to organise breastfeeding awareness activities.	Evidence of good level of partnership at local level in some but not all areas.	C
		Breastfeeding promotion is being linked with other relevant Health Promotion activities and strategies	Limited, particularly in context of child health, parenting, child development.	P

Objective 3.2 The specific needs of communities or groups with lower than average breastfeeding rates are assessed and addressed.

No	Action	Expected outcome	Outputs/comments	Code
3.2. (23)	Enhanced efforts will be made to tailor antenatal and postnatal services to meet the identified breastfeeding promotion and support needs of communities with low breastfeeding.	Local research has been undertaken to explore the reasons why particular social and ethnic groups do not generally access antenatal and postnatal breastfeeding support services (e.g. through attendance at antenatal classes and community breastfeeding support groups).	Some research has been undertaken locally (NW, NE, SE) and through university students as well as individual hospitals e.g. Cavan Hospital.	P
		Services tailored to the needs identified in the research are being put in place.	No progress No clear indicator to measure progress	NC

GOAL 4 - Legislation and public policies promote, support and protect breastfeeding.

Objective 4.1 A National Implementation Committee is overseeing, monitoring and evaluating progress towards the achievement of the Strategic Action Plan.

No	Action	Expected outcome	Outputs/comments	Code
4.1. (24)	A National multi-disciplinary, multi-sectoral Breastfeeding Implementation Monitoring Committee will be established to assist the National Coordinator in monitoring the implementation of this Strategic Action Plan.	A national Breastfeeding Implementation Monitoring Committee has been established and resources allocated to support it.	NBSIC established in 2007. Resource allocation unclear.	P

Objective 4.2 The collection of standardised, comprehensive and timely infant feeding data forms part of national and regional health information policies and practices.

No	Action	Expected outcome	Outputs/comments	Code
4.2. (25)	A standardised, comprehensive, evidence-based system of infant/child feeding data collection, together with a system of timely reporting of findings, will be incorporated into present and future routine child health information systems.	Taking account of the National Health Information Strategy and the National Children's Office Child Well-being Indicators:	National Child Health Information System has not been developed to date	CM
		Health Service sources of infant/child feeding data collection have been standardised regionally/nationally and meet best-evidence based criteria e.g. as in the parent-held child health record system.	Parent-held child record available in Midwest, North West and North East but has not been implemented nationally	NC
		Internationally recognised WHO/UNICEF definitions of infant feeding are being used in all relevant data collection systems,	These are used in some information systems and not in others.	P

		Breastfeeding as an indicator has been included in all child health data systems	Included in National Set of Child Well-Being Indicators but not in HSE child health performance indicators	P
		The time lag for the availability of infant feeding data from the National Perinatal Reporting System (NPRS) has been shortened.	Substantial improvements were observed over the time period of the Plan.	C
		The existing system of collecting and analysing data for health service infant/child feeding performance indicators has been reviewed and improved in line with meeting best practice standards.	No progress.	NC
		Standardised data collection systems are being audited regularly.	No progress.	NC
		National/regional infant feeding data are being analysed, published and disseminated within one year of collection, with results informing future planning, including commitments to address any inequalities identified.	NPRS data is published within one year of collection. However, HSE data is not fit for purpose as yet. Breast feeding maintenance data is not uniformly collected because of disparate child health information systems in use- national core information set to be included in NICIS (National Immunisation and Child Health Information System) business case currently in preparation. BFHI data is within one year and informs activity	NC

		An infant feeding survey has been undertaken to establish accurate baseline data for the purposes of setting/evaluating achievable targets as part of this Action Plan.	Yes, a one-off survey was undertaken in 2008 but not linked to the targets.	C
		The effect on breastfeeding uptake and duration rates of prevailing: - paid and unpaid maternity leave entitlement of full-time, part-time and casual workers and	No progress	NC
		- the number, duration and length of entitlement period for breastfeeding breaks in the workplace is being reviewed two yearly and the findings acted upon.	No progress	NC
4.2. (26)	Mechanisms for routine audit of service user satisfaction will be put in place to determine the quality of the breastfeeding information and support given in maternity, paediatric and public/community health care services.	Routine service user feedback procedures have been instigated and protocols put in place for addressing any sub-optimal practices identified.	Yes, HSE complaints system and Consumer Research panels. BFHI process for eight designated hospitals.	P
		Routine audits are being conducted to determine the percentage of service users attending public ante-natal/parentcraft education classes. These audits also include SES data and an assessment of whether these classes are meeting the needs of service users.	Some audits being done at local level	NC

Objective 4.3 The protection of breastfeeding from the marketing pressure of manufacturers and distributors of breast milk substitutes (and allied products) is enhanced.

No	Action	Expected outcome	Outputs/comments	Code
4.3. (27)	Staff of the official agencies of the FSAI will improve procedures for monitoring compliance with and enforce the most up-to-date EU Regulations on the marketing of breast milk substitutes and related infant foods and drinks in accordance with their legislative responsibility.	Standard procedures are being used for the monitoring and enforcement of current legislation and the reporting of breaches of the legislation.	Standard procedures exist for enforcement by the FSAI. There is no active system for monitoring and reporting breaches to the authority.	P
		Undergraduate and in-service information on legislative controls is being provided for all relevant occupational groups.	Component of HSE Infant Feeding Policy for Maternity Services. No audit of policy implementation as yet, except in Baby Friendly hospitals	P
		Information on monitoring and enforcement of the legislation regarding marketing of infant formula and related infant foods and drinks has been provided to all relevant stakeholders.	Legislation available on FSAI website but no information on monitoring and enforcement of it. No defined approach to ensuring stakeholders informed.	P
4.3. (28)	Irish policy-makers and legislators will continue to pursue the full implementation of the International Code of Marketing of Breast Milk Substitutes and subsequent relevant WHA Regulations and the Global Strategy on Infant and Young Child Feeding in formulating national, EU and International legislation and standards.	Irish representatives at World Trade Organisation (WTO) and other relevant trade agreement talks are giving due regard to their responsibility to protect breastfeeding and infant health in accordance the WHO International Code and the Global Strategy, both of which have been endorsed by Ireland.	Unclear No clear indicator to measure progress	CM
		Ireland is taking a lead in lobbying for EU Regulations on the marketing and other controls on Breast Milk Substitute manufacturers/distributors so that these are extended to include follow-on, preterm and other specialist formulae and infant drinks, as well as bottles, teats and other products covered by the International Code.	No evidence of Ireland taking a lead on influencing EU Regulations in this regard.	CM

		Information aimed at the general public and key stakeholders on the principles, aims and provisions of the International Code and on procedures for monitoring compliance with it have been disseminated widely, including on the FSAI and HPU websites.	Information on the Code and the European regulations available on the FSAI website and www.breastfeeding.ie	P
4.3. (29)	Enforcement of the EU Directive on 3rd country marketing of infant formulae will be reviewed.	Review has taken place of current practices in this area.	No review undertaken	NC
		Enforcement of EU and national Legislative marketing controls on companies manufacturing infant formulae in Ireland for export to non-EU countries is being monitored	FSAI	P

Objective 4.4 Existing policies and practices that discriminate against breastfeeding are discontinued.

No	Action	Expected outcome	Outputs/comments	Code
4.4. (30)	Breastfeeding mothers and babies will be protected from discrimination in public places.	Existing legal protections against discrimination afforded to mothers who are breastfeeding outside their homes have been reviewed in the light of developing case law.	An increase in cases relating to workplace discrimination on pregnancy grounds is noted.	P
		In consultation with service, amenity and recreational providers, best practice guidelines on supporting and protecting breastfeeding in public areas have been drawn up and disseminated.	Appropriate practice remains ill-defined.	NC

		A 'breastfeeding friendly award' system has been set up as an incentive to service providers to facilitate breastfeeding on their premises.	Feedback from mothers in Consumer research focus groups favoured promoting social acceptance of breastfeeding instead of designated breastfeeding premises, and this project was not progressed.	NC
		Representations have been made to incorporate breastfeeding friendly practices into existing quality award systems for service industries and other businesses.	Following consumer research a decision was made not to progress this project	NC
		The substitution of symbols like the 'baby bottle' symbol with more generic signs to denote for e.g. baby-care facilities in public areas has been promoted and encouraged among service providers.	Yes. Particular success has been Dublin airport and some large shopping centres	P
		State-funded or grant-aided, government and public service organisations/facilities are taking a lead in these initiatives.	No	NC
4.4. (31)	The Department of Education and Science will encourage schools, educational and training establishments to support student mothers to breastfeed while continuing their education.	All relevant policies and practices in educational and other training establishments are in accordance with best evidence-based standards for supporting breastfeeding students.	No progress	NC
4.4. (32)	Barriers to breastfeeding within the health care system will be identified and addressed.	Policies and practices that are barriers to breastfeeding, like the 'free infant formula milk schemes' have been reviewed and the review findings have been acted upon.	Breastfeeding Supportive Workplace initiatives of HPH/BFHI No review undertaken in community services.	P

		Practices regarding infant formula distribution in maternity hospitals have been reviewed to assess their impact on breastfeeding, and acted upon as necessary.	Have been reviewed and are monitored in Baby friendly Hospitals Contained in HSE Infant Feeding Policy Maternity	C
4.4. (33)	The protection of the mother-child breastfeeding relationship will be one of the aspects taken into consideration in health impact assessment of relevant government policies.	Criteria have been developed for inclusion in health impact assessment procedures, which ensure that relevant Government policies protect the mother-child breastfeeding relationship.	No progress. *Healthy Ireland* policy reinforces role of health/social impact assessment.	NC
		These criteria have been integrated into all relevant health impact assessment procedures and policies.	No progress	NC
4.4. (34)	A concerted effort will be made to protect breastfeeding in exceptional circumstances e.g. when a breastfeeding child is the subject of a legal care or custody order.	In conjunction with relevant stakeholders, a review has been undertaken of the level of protection afforded to breastfeeding in circumstances where the breastfeeding mother and her child are separated for legal or other enforceable reasons and the review findings have been acted upon as necessary.	No review undertaken.	NC

Objective 4.5 Maternity protection legislation and policies pertaining to breastfeeding are strengthened.

No	Action	Expected outcome	Outputs/comments	Code
4.5. (35)	In future maternity protection legislation and Social Partnership Agreements, and in all work-life balance/family-friendly work initiatives the continuation of breastfeeding will be protected and facilitated in accordance with WHO, EU and Department of Health and Children, ILO and CEDAW	The Protection and support for the continuation of breastfeeding is being afforded an integral place in Maternity Protection Legislation, family-friendly workplace initiatives and Social Partnership Agreements.	Extension of paid maternity leave. Little evidence of integration with family-friendly workplace/social partnership agreements.	P

	guidelines.			
		Within the context of Social Partnership, to the extent that is possible, the importance of breastfeeding will be acknowledged and initiatives facilitated.	HPH/BFHI Workplace Initiative worked with Social Partnership,	P
		Appropriate working conditions and suitable premises and facilities for workplace breastfeeding/lactation breaks, where possible, are being provided in accordance with the standards and guidelines set down by the DoHC, and Health and Safety legislation.	Unclear	CM

Objective 4.6 Irish government overseas aid programmes support, protect and promote breastfeeding.

No	Action	Expected outcome	Outputs/comments	Code
4.6. (36)	Irish-funded projects and programmes in developing countries and emergency situations will abide by WHO/UNICEF guidelines on protecting breastfeeding and will integrate the promotion, support and protection of breastfeeding within these projects and programmes, whenever appropriate.	Development Cooperation Ireland (DCI) is promoting the implementation of best practice in all of its programmes, based on WHO/UNICEF guidelines	No clear indicator to measure progress	P
		DCI staff working in bilateral health programmes and with partner organisations implementing health projects are informed of the strategic action plan and encouraged to support best practice on breastfeeding	Interview with DCI indicates this is current practice. No clear indicator to measure progress	P
		DCI is supporting the following as important aspects of good practice: - No free or subsidised breast milk substitutes are provided, except in accordance with WHO/UNICEF guidelines. - Breastfeeding promotion,	No clear indicator to measure progress No external review of practice has been undertaken. However, interview findings suggested high awareness of	P

		protection and support is integrated into all relevant programmes. - All programmes and projects abide by the Code and subsequent relevant WHA resolutions.	infant feeding policies to support breastfeeding.	
		- The continuation of Breastfeeding is facilitated in education/development and work creation projects that involve women with infants and young children.	No clear indicator to measure progress	CM

Objective 4.7 National policies, strategic action plans and local implementation plans relating to breastfeeding are disseminated to relevant stakeholders.

No	Action	Expected outcome	Outputs/comments	Code
4.7. (37)	All relevant stakeholders will be informed of current and future breastfeeding policies and plans.	Dissemination of these to all relevant stakeholders, providers and service users is being undertaken. Information resources, including e-information, have been developed and disseminated.	A component of the HSE Infant Feeding Policy for Maternity Services www.breastfeeding.ie	P

GOAL 5 - Irish Society recognises and facilitates breastfeeding as the optimal feeding method of infants and young children.

Objective 5.1 Employers support and protect breastfeeding among their employees.

No	Action	Expected outcome	Outputs/comments	Code
5.1. (38)	Employer, employee representative organisations and other key stakeholder groups will be provided with information on their obligations/entitlements under current maternity protection legislation.	Information resources have been developed on best practice support for breastfeeding in the workplace and have been disseminated to relevant groups.	?	CM
		Participation in the HPH/ BFHI breastfeeding supportive health care workplaces project is being fostered and encouraged.	Pilot project initiated.	P

5.1. (39)	Employers will support the provision of suitable workplace facilities and practices that enable employees to take breastfeeding or lactation breaks during their working day and will be encouraged to support the provision of greater flexibility in working hours in order to facilitate longer breastfeeding duration.	Suitable premises and equipment are being provided where possible in workplaces, in accordance with DoHC and Health and Safety at Work guidelines.	No review of practice has been undertaken.	CM
		Employers will be encouraged to offer greater flexibility in working hours to employees to facilitate the continuation of breastfeeding e.g. short-term reduction in working hours, part-time, job-sharing etc. so as to facilitate the continuation of breastfeeding. Health care employers are taking a lead in this.	Practice is unclear.	CM

Objective 5.2 Positive images of breastfeeding are universally promoted, especially in mass media portrayals.

No	Action	Expected outcome	Outputs/comments	Code
5.2. (40)	There will be an ongoing national awareness raising strategy to promote the importance of breastfeeding and highlight the risks of a decision not to breastfeed.	A social marketing campaign has been developed using a partnership process, which involves a multi-media, multi-sector, multi-agency approach to promoting breastfeeding on an annual basis.	Yes in part	P
		The importance of breastfeeding for diabetes, obesity and cancer prevention, cardiovascular health, etc. are being highlighted in health promotion initiatives and campaigns addressing these and other relevant topics.	Limited. Some examples include HSE Factsheets Irish Diabetic Society Factsheet BFHI material Irish Cancer Society leaflets EU Action Plan on Childhood Obesity	P

		National Breastfeeding Week has been established as the annual primary focus for marketing breastfeeding, disseminating information and generating media interest in it.	Yes	C
		Commitments to resource these initiatives have been secured.	Yes but subject to annual review	P
5.2. (41)	All organs of the national, regional and local media will endeavour to portray breastfeeding in a positive manner.	Commitment has been sought from the media organisations to depict breastfeeding as normal, achievable and desirable when the topic of maternal and child health arises in both factual reporting and fictional portrayals.	Submissions forwarded to BAI and ASAI	P
		A media information resource has been developed to advise on positive media portrayals of breastfeeding.	No media guidelines developed.	NC
		The media is being used to increase awareness of sources of breastfeeding support.	National Breastfeeding Week	C
		Procedures have been set up to monitor media portrayals of infant feeding and to provide feedback to the relevant media bodies as necessary.	No, establishment of Baby Feeding Law Group.	P

Objective 5.3 Breastfeeding information and promotion is incorporated into the education system.

No	Action	Expected outcome	Outputs/comments	Code
5.3. (42)	Breastfeeding information and promotion is incorporated into the Irish education system.	In agreement with DES and other relevant health and education stakeholders, breastfeeding information has been introduced to schoolchildren at different ages and stages of schooling within the context of the SPHE curriculum.	Junior Cycle Resource developed.	P
		Information and education materials on breastfeeding, have been developed, tested and disseminated for use by teachers of students in primary, secondary and tertiary educational facilities, as well as pre-school facilities.	Junior Cycle Resource developed.	P
		Information on the importance of Breastfeeding has been developed, tested and disseminated for use in pre- service And in-service teacher and child care worker training.	In-service training provided through SPHE Regional Managers	P
5.3. (43)	The content of school textbooks and other educational resources will be routinely reviewed to ensure that breastfeeding is portrayed as the normal and natural way to feed a baby.	Agreement has been sought with the relevant publishing companies/bodies to have breastfeeding-friendly and accurate portrayals of infant feeding incorporated where appropriate into schoolbooks and other materials used in primary, secondary and pre-school settings.	Discussions held with publishers	P

		Guidelines have been developed to assist in this.	No guidelines developed.	NC
5.3. (44)	Parent Representative Groups will be encouraged to support the introduction of breastfeeding information into the Irish education system.	Links for the purpose of liaison and consultation have been developed with relevant groups on the issue of breastfeeding education in schools.	Parent group input and focus groups as part of development of Junior Cert pack	CM

Appendix 5

Further Comments

Respondents were given the opportunity to provide additional comments at the end of the questionnaire. Many of the additional comments were also suggestions for future policy development and have been included in Chapter 5. The remaining open-ended responses have been collated by theme and are summarised in the following table.

Theme	Summary of comments
Policy	• Welcome this review, even 8 years later. • Regional coordinators would help in local areas, providing greater support for women in the first two-three weeks. • Breastfeeding not high on the HSE priority list. • Policy needs to be supported at highest level possible and legislation needs to be implemented. • There should be ring fenced funding to promote encourage and sustain breastfeeding at local and national level. • We have come a long way, with slow incremental improvements. Further improvements will require more joined up work from all sectors, improved personal skills and more involvement of women working with health professionals to create more supportive environments. Women are the real experts on how best we can do this, so they need to be directly involved in guiding the updating of policies. • Requirement to review the current resources (cost) in breastfeeding and the outcomes. Current outcomes not acceptable for the investment - system need to be reviewed. • Policy makers need the financial and legislative backing to implement serious policy that will ensure breastfeeding is the norm for infants born in Ireland. This in turn will improve public health overall and result in cost savings to the exchequer in the long term.
Services	• Regular auditing of implementation should take place in each maternity site and in Primary Care Teams which should incorporate the experiences of mothers and their family members. • Hospitals which maintain the BFHI standards should be rewarded with additional funding to encourage each maternity to reach high standards. • Maintain visiting policy to allow time for breastfeeding. • Great success following the appointment of Clinical Midwife Specialist in Teenage pregnancy. Breastfeeding rates increased from 0% to over 50%. • Primary care is not sufficiently developed to sustain breastfeeding. • Lack of one to one support in the community. • Public Health Nurses' workload is complex and capacity to support breastfeeding mothers is compromised. • Lack of engagement by mother with voluntary support groups.
Training	• Encourage journal clubs; more reference books and journals should be made available in the community; possibly overseen by resource person. • Nursing and NCHD short courses on breast feeding. • Basic midwife training does not sufficiently address the educational needs of midwives. Need for additional training and more work at engaging with midwives and prioritising breastfeeding.

	• Regular staff updating essential and breastfeeding questions should be a regular feature on medical and nursing students' exam papers. • In the main, Public Health Nurses are not midwives and their child and maternal health module is completely inadequate.
Data	• KPIs should be developed for all disciplines engaging with all pregnant women from antenatal through to birthing and onto postnatal. • Difficult to know where to conduct further qualitative research without proper data. • Ireland is not conducting a regular national review (as recommended in the Infant Feeding Survey 2000) other than Perinatal Statistics.
Messaging	• Mothers need to be informed about the risks of not breastfeeding; earlier education around the benefits of feeding. • Advice in maternity hospitals tends to be too technical and methodical. • Promotion of breastfeeding has gone too far. In maternity hospitals mothers-to-be should be shown how to prepare bottle feeds as well as shown how to breastfeed so that they can make an informed decision. • Government investing heavily in tackling childhood obesity, yet no mention of how breastfeeding will protect against this.
Research	• Need for cost benefit studies relating to breastfeeding looking at the effects across a whole lifetime. • Need research into feeding in the first 24 hours after birth.
Leadership	• Lack of progress toward breastfeeding support in Ireland. Need to be assured that the DoHC, HSE and HCPs take this issue seriously. • Change needs to come from high level government. One of the causes of the Irish obesity epidemic is low rates of breastfeeding and early weaning to solids. • The breastfeeding strategy is fantastic but aspirational, as there is no political will to implement and support it fully in my opinion. It is an indictment of our health and political system and will do nothing to change public practice in any meaningful way if this does not change. • Government needs to make breastfeeding a public health policy issue which would be nationally beneficial for health and health economics.
Managing commercial interests	• The economic importance of formula milk production in Ireland must be recognised and addressed within the development of future strategy. Excellence in both areas is not mutually exclusive. It is important to address the possible conflicts so as to garner the sufficient political will necessary for a positive impact on breastfeeding prevalence.
Policy Implementation gap	• The HSE need to provide resources for healthcare workers 'on the ground' to help initiate and maintain breastfeeding, otherwise no reports or reviews will make any difference. • This report is only likely to show some management changes but at ground level this issue is static. • Policies need to be based on practical evidenced based care and support is not available for individual women and their families. Resources need to be directed to this if we are to reach our goals.
Additional needs	• Recent qualitative research of mothers experiences of breastfeeding following a caesarean section (n=11), highlighted how these mothers need additional support to initiate breastfeeding. Particularly in relation to maternal infant separation and pain management. • Important to highlight the message of breastfeeding as a protector against breast cancer and other types of cancer; obesity is not given any currency. • Need a huge improvement in the area of support for parents of preterm babies. Support should not be left to voluntary groups anymore, the government should fund much more support for mums. • Supports should be in place for our mothers going home, especially as they are discharged before baby gets sleepy from being jaundiced, and breast engorgement occurs. • Imperative to support those mothers with sick babies to initially express and then hopefully transition to exclusive breastfeeding.

Involvement of service users	• Regular auditing of implementation should take place in each maternity site and in Primary Care Teams which should incorporate the experiences of mothers and their family members.
Nutrition Education	• Nutrition education including the benefits of breastfeeding needs to be included in the primary school programme.

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