A REVIEW OF THE MATERNAL AND INFANT NUTRITION FRAMEWORK WITHIN NHSGGC (APRIL 19)

Author: Anna Baxendale
Head of Health Improvement
Public Health Directorate
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1. Maternal and Infant Nutritional Framework Review

1.1 Background

Maternal and Infant Nutrition programmes (referred to as MINF) are overseen by a NHSGGC whole system multi-disciplinary steering group. Within NHSGGC the MINF programme reflects local implementation activity outlined in the National Maternal and Infant Nutrition Framework published in 2011. In August 2017 the local MINF group instigated a review of resources, structures and outcomes associated with the programme.

The timing of this review coincided with significant developments in both Maternity Services with the implementation of Best Start and Children and Family team development associated with the implementation of the new Universal Health Visiting Pathway and the review required to consider the impact of these developments for MINF. A summary of the developments is described in Appendix 1.

The Public Health Team were asked to undertake this review exercise.

1.2 Rationale

The rationale for the review was therefore to:
- Establish clear strategic outcomes for the MINF programme
- Ensure local activity is informed by updated evidence and learning from across Scotland
- Explore current MINF activities to inform funding arrangements going forward

1.3 Approach to Review

The approach taken to the review included:

1.3.1 Phase 1
- A Literature Review of published/unpublished literature post MINF (Scottish Government, 2011) publication. Details of the search methodology are included in the Literature Report.
- Analysis of data in relation to the key public health challenges of Maternal Weight; Breastfeeding; and Child Healthy Weight.
- A mapping of related NHSGGC activity informed by a review of MINF Group and Sub-group minutes and the consideration of associated reports and materials where available.
- A series of Key Informant meetings with feedback on initial content describing current arrangements from Key Informants. (Appendix 2 outlines those roles and groups who have contributed in this way).
- Observations of practice in Breastfeeding clinic and labour/postnatal ward visits to enable better understanding of key settings for current activity.
- A mapping of associated MINF arrangements in other Boards across Scotland undertaken by the Chief Midwife consisting of 8 returns.
- A preliminary feedback session with MINF group outlining major themes with opportunity for feedback and identification of additional data/research for consideration and the identification of key comments at this stage.
- The production of a preliminary report for discussion with MINF Group and related service planning/management stakeholders through which the recommendations were developed.
1.3.2 Phase 2

The initial phase identified key points for consideration for both the MINF group and a wider number of service areas. A draft Engagement Report was made available to stakeholders for comment a period of approx 6 months. The direction of travel outlined in the engagement report was considered by a range of service planning groups such as the Obesity Oversight Group; Gestational Diabetes subgroup; Heads of Children’s services as well as colleagues from Scottish Government as part of the Breastfeeding Programme for Government to strengthen strategic alignment with wider developments. Two engagement sessions were held with key maternity and community stakeholders all of which have informed the final draft of this report.

1.4 Service User Involvement

The involvement of mothers and families was out with the scope of this current exercise, however going forward MINF requires to routinely use a range of participatory approaches to gain the insight and opinions of the target groups/ service users relating to MINF programmes. Routine audit work with mothers as part of BFI Standards will be systematically collated and used to inform local services as part of continuous approach to improvement.

The Scottish Maternal and Infant Nutrition Survey 2017 was used to inform the review.

1.5 Equality Impact Assessment

Equalities are in part considered within this review. Detailed data relating to protected characteristics or deprivation is not routinely available for many aspects covered by the review; however what is clear from the literature and available data is that ethnicity, gender and deprivation impact on infant feeding practices.

It is therefore recommended that further EQIA is undertaken as part of the implementation approach proposed for review workstreams going forward. These include:

- Further interrogation of population and service data to better understand the needs of key groups;
- Engagement with communities and involvement to inform programme design
- Consideration of mainstreaming activities within the workstreams going forward including; accessibility; communication and information requirements and consideration of person/ family centred approach to include protected characteristics as appropriate
- Further targeting of intervention based on research evidence within deprived communities recognising the impact of poverty on nutrition.

MINF EQIA Tool
2. Evidence Review

2.1 MINF Literature Review – Appended Document

The literature review is a stand-alone document. Key messages from the literature are included within the discreet sections of the report below.

2.2 Scientific Advisory Committee for Nutrition (SACN) in the First Year of Life

The SACN Report: Feeding in the First Year of Life 2018 has subsequently been published and will drive key nutritional messages.
3. Maternal Nutrition

3.1 Maternal Nutritional Status

Currently a limited focus on preconception health and healthy weight was identified by the review. The emphasis relates predominantly to population public health messages regarding weight management and folic acid uptake.

A national programme of work to develop a pre-conception action plan is planned which should inform the approach adopted locally. In the course of the review key areas which offer potential to improve nutritional status include; influencing content of parenthood curriculum for schools; focusing on pregnancy planning within family planning services and assisted conception services; targeting key groups of women of childbearing age e.g. those who are known to be diabetic.

3.1.1 Way Forward

Opportunities to increase our focus on preconception nutritional status through parenthood and pregnancy planning require further effort. NHSGGC should support the development and subsequent implementation of the national pre-conception action plan.

3.2 Vitamin Distribution and Uptake

3.2.1 Antenatal

From April 2017 the provision of vitamin D and folic acid to pregnancy women has been part of the national (UK) Healthy Start programme with routine distribution as part of the maternity pathway from booking.

However, local pharmacy data reflecting the distribution of vitamins suggests that the optimum numbers of vitamins are not being distributed at antenatal visits. Inconsistency in the approach to distribution was been identified.

Reports from Scottish Government (cycle 194) show 71% of those that could be entitled to Healthy Start in NHSGGC are currently registered and receiving vouchers for food and vitamins, above the Scottish average (69%).

In 2019 the Scottish Best Start Programme will replace Healthy Start with entitlement to a Best Start Grant from the antenatal stage. An initial promotion of the scheme on social media has not yet been supported with materials for Boards to undertake local promotion however this is identified within local Child Poverty Action plans.

3.2.2 Postnatal

After birth, Healthy Start women’s vitamins for breastfeeding mothers and Healthy Start children’s vitamins are means tested and require an application signed by a health professional.

Within NHSGGC, Healthy Start Vouchers for vitamins can be exchanged at any community pharmacy. In August 18, seventy nine pharmacies were currently providing the core distribution of the vitamins with a geographical spread across all communities in GGC. A local addition to the scheme in the form of a Vitamin D Sunshine Card was introduced to enable pregnant refugees and asylum seekers to access vitamins.
Current nutritional guidelines recommend supplements for all breastfeeding mothers and children from 6 months to 5 years and therefore those not eligible for Healthy Start should be advised to purchase vitamins. Healthy Start vitamins are available to purchase by families out-with the Healthy Start programme and present a low cost option.

Detailed analysis is constrained by the national data reporting system (UK) and complexity of eligibility, however extensive analysis undertaken within Lothian Health Board suggests that data relating to uptake was not reflected in real terms. Improvement actions to promote uptake through professionals were found to be effective MacKenzie 2016.

When comparing Scottish Government data with the number of families receiving Healthy Start children’s vitamin vouchers and the actual number of vitamins distributed via the community pharmacy, only around 10% were collecting the vitamins (based on cycle 194).

Proposals to closely link Healthy Start vitamins with access to financial benefits are now being considered as part of the Best Start Programme which launched in 2019. The initial phase does not detail the promotion of vitamins as part of the benefit arrangements. From April 2019 the new Scottish formulation for infant vitamins will reflect the SACN 2018 report findings.

The Scottish Maternal and Infant Nutrition Survey 2017 provides further insight:

- The majority of women reported taking dietary supplements prior to or as soon as they knew they were pregnant, 86% in Scotland compared to 91% in GGC. Half of which reported taking Healthy Start vitamins nationally compared to 57% in GGC.

  Within GGC the majority of respondents from the most deprived areas (61%) reported taking Healthy Start vitamins compared with 37% of those in the least deprived areas.

  Nationally 84% of BME groups and 91% Asian, Asian Scottish, Asian British respondents reported taking dietary supplements prior to or as soon as they were pregnant

- A third of respondents nationally reported giving infant vitamin drops (35% in GGC).

  Nationally there is a ten percent difference between the number of respondents giving their infants vitamin drops between the least and most deprived areas (41% compared to 31%).

  Nationally 43% of BME (43% Asian) respondents gave vitamin drops reported giving their infants vitamin drops

- Less than 2/3rd (64%) were aware of the Health Start Scheme in Scotland (67% GGC)

  A higher proportion of respondents from the most deprived areas were aware of the Health Start Scheme in Scotland compared with those from the least deprived areas (70% and 55% respectively).

  Less than half 48% of BME respondents (43% Asian) were aware of the Healthy Start Scheme in Scotland
3.2.3 Way Forward

Actions to improve uptake of vitamin supplementation building on the Healthy Start scheme include:

- extended availability through wider pharmacy provision;
- clear antenatal and postnatal messaging for families and professionals;
- targeting uptake in most deprived areas and promoting low cost children’ vitamins across the population.
- Information on vitamins should be available in a range of BME languages

Wider promotion of the Best Start Grant should be undertaken with health professionals and other partners as part of the action to mitigate Child Poverty.

3.3 Maternal Weight

The impact of a mother’s own birth weight, her pre-pregnancy weight and weight gained during pregnancy can influence the birth weight of her infant. Low birth weight and poor weight gain in infancy are linked to the development of chronic conditions such as cardiovascular disease, hypertension, insulin resistance, type 2 diabetes, dislipidaemia (altered blood fat levels) and obesity (Scottish Government, 2011).

Maternal obesity, defined as a BMI $>30 \text{ kg/m}^2$ at the first booking appointment, poses a significant risk to health for both the mother and infant. Obese women have an increased risk of developing type 2 diabetes, impaired glucose tolerance and gestational diabetes during pregnancy. Obese women have higher rates of induction of labour, caesarean section and post-partum haemorrhage as well as increased risk of stillbirth, congenital abnormalities, premature birth and neonatal death.

Infants born to mothers with gestational diabetes are more likely to have a higher overall fat mass, a higher percent body fat and are at greater risk of obesity as they progress through childhood, than those born to mothers with normal glucose tolerance. Even where the obese mother's glucose tolerance is normal, obesity during pregnancy still increases the level of fat in the infant and predisposes towards bigger, heavier infants.

Given the rise in overweight and obesity in the general population and in women of childbearing age, the number of women likely to be entering their first pregnancy, and subsequent pregnancies, already overweight or obese is of clinical and public health concern.

3.3.1 Body Mass Index (BMI) of Pregnant Women

Just under half of pregnant women (43.2%, $n=5361$) were of normal weight at the time of their first antenatal booking appointment in 2017/18. This was similar to the previous year 43.9% ($n=5832$). The number of pregnant women who were overweight was 3,381 (27.3%), obese 1765 (14.2%) and severely obese 1053 (8.5%) again similar to previous year.
Table 1: Number and Percentage of Women Booked for their First Antenatal Appointments by Body Mass Index and by Maternity Unit from 1 April 2017 to 31 March 2018

<table>
<thead>
<tr>
<th>BMI Category</th>
<th>Not assigned to a unit</th>
<th>%</th>
<th>Princess Royal Maternity Hospital (PRM)</th>
<th>%</th>
<th>Queen Elizabeth University Hospital (QUEUH)</th>
<th>%</th>
<th>Royal Alexandra Hospital (RAH)</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI Not Recorded</td>
<td>31</td>
<td>27.5</td>
<td>208</td>
<td>5.5</td>
<td>198</td>
<td>3.7</td>
<td>102</td>
<td>3.3</td>
<td>539</td>
<td>4.3</td>
</tr>
<tr>
<td>Underweight BMI &lt; 18.5</td>
<td>4</td>
<td>2.8</td>
<td>78</td>
<td>2.1</td>
<td>151</td>
<td>2.8</td>
<td>64</td>
<td>2.1</td>
<td>297</td>
<td>2.4</td>
</tr>
<tr>
<td>Normal BMI 18.5 - 25</td>
<td>49</td>
<td>34.0</td>
<td>1,577</td>
<td>41.5</td>
<td>2,556</td>
<td>47.4</td>
<td>1,179</td>
<td>38.5</td>
<td>5,361</td>
<td>43.2</td>
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<tr>
<td>Overweight BMI 25-30</td>
<td>45</td>
<td>31.3</td>
<td>1,012</td>
<td>26.7</td>
<td>1,426</td>
<td>26.4</td>
<td>898</td>
<td>29.4</td>
<td>3,381</td>
<td>27.3</td>
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<td>Obese BMI 30-35</td>
<td>8</td>
<td>5.6</td>
<td>577</td>
<td>15.2</td>
<td>678</td>
<td>12.6</td>
<td>502</td>
<td>16.4</td>
<td>1,765</td>
<td>14.2</td>
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<tr>
<td>Severely Obese BMI 35-40</td>
<td>2</td>
<td>1.4</td>
<td>221</td>
<td>5.8</td>
<td>265</td>
<td>4.9</td>
<td>202</td>
<td>6.6</td>
<td>690</td>
<td>5.6</td>
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<tr>
<td>Severely Obese BMI 40-45</td>
<td>4</td>
<td>2.8</td>
<td>82</td>
<td>2.2</td>
<td>90</td>
<td>1.7</td>
<td>84</td>
<td>2.7</td>
<td>260</td>
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<td>Severely Obese BMI &gt; 45</td>
<td>1</td>
<td>0.7</td>
<td>41</td>
<td>1.1</td>
<td>33</td>
<td>0.6</td>
<td>28</td>
<td>0.9</td>
<td>103</td>
<td>0.8</td>
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<tr>
<td>Total</td>
<td>144</td>
<td></td>
<td>3,796</td>
<td>5.397</td>
<td>3,059</td>
<td>3.097</td>
<td>12,396</td>
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</tbody>
</table>

Source: PNBS and BadgerNet; Trakcare Dec 2018

Within the adult population, obesity increases as area deprivation increases; women in the most deprived area are more likely to be obese than women living in the least deprived areas. Levels of obesity are higher for women in deprived areas than they are for men and the gap between the most and least deprived areas is also much bigger for women than it is for men (ScotPHO, 2017).

When considering the BMI of women of child bearing age within NHSGGC approx 28% overweight, 20% obese and severely obese (table 2 below).

Table 2: Estimated Numbers Of NHSGGC Residents By BMI Classification, Age And Females

<table>
<thead>
<tr>
<th>Overweight/obese (BMI 25 plus)</th>
<th>Obese (BMI 30 plus)</th>
<th>BMI 25 plus and onwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 to 24</td>
<td>25170</td>
<td>12081</td>
</tr>
<tr>
<td>25 to 34</td>
<td>41239</td>
<td>15992</td>
</tr>
<tr>
<td>35 to 44</td>
<td>56421</td>
<td>24185</td>
</tr>
<tr>
<td>Total</td>
<td>122830</td>
<td>52258</td>
</tr>
</tbody>
</table>

Source: SAPE 2010

3.3.2 Gestational Diabetes Mellitus (GDM)

Women with gestational diabetes are at increased risk of having a large baby, a stillborn baby or a baby who dies shortly after birth. Within NHSGGC, the assessment of pregnant women and risks associated with GDM are based on a BMI>= 35, previous macrosomic baby (weighing >4 kg at birth), family history of diabetes, previous gestational diabetes and mother’s ethnic origin.
Just over a quarter, 3,471 (28.2%) of pregnant women at booking were recorded as having ‘any risk’ of GDM and were eligible to be offered an oral glucose tolerance test at 24-28 weeks gestation.

Table 3: Number Of Women Booked for their First Antenatal Appointments in NHSGGC 1 April 2016 to 31 March 2017 and GDM Risk Factors

<table>
<thead>
<tr>
<th>Maternity Unit</th>
<th>BMI &gt;=35</th>
<th>Previous Macrosomic Baby</th>
<th>Family History Diabetes</th>
<th>Previous Gestational Diabetes</th>
<th>Origin Mother Risk</th>
<th>Any Risk*</th>
<th>Bookers Total</th>
<th>% Any Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not assigned to unit</td>
<td>5</td>
<td>0</td>
<td>9</td>
<td>1</td>
<td>22</td>
<td>33</td>
<td>140</td>
<td>23.6</td>
</tr>
<tr>
<td>Princess Royal Maternity Hospital (PRM)</td>
<td>343</td>
<td>18</td>
<td>312</td>
<td>36</td>
<td>534</td>
<td>1057</td>
<td>3775</td>
<td>28.0</td>
</tr>
<tr>
<td>Queen Elizabeth University Hospital (QEUH)</td>
<td>385</td>
<td>45</td>
<td>595</td>
<td>44</td>
<td>964</td>
<td>1624</td>
<td>5365</td>
<td>30.3</td>
</tr>
<tr>
<td>Royal Alexandra Hospital (RAH)</td>
<td>312</td>
<td>25</td>
<td>394</td>
<td>74</td>
<td>123</td>
<td>757</td>
<td>3037</td>
<td>24.9</td>
</tr>
<tr>
<td>Total</td>
<td>1045</td>
<td>88</td>
<td>1310</td>
<td>155</td>
<td>1643</td>
<td>3471</td>
<td>12317</td>
<td>28.2</td>
</tr>
</tbody>
</table>

Source: BadgerNet, July 2018   * Summed individual risks may exceed any risk total

Arrangements to address the needs of women who are identified as at risk of GDM/ require intervention vary across NHSGGC and have been subject to a business case development for progression in conjunction with the Diabetes Prevention and Early Detection Programme in 19/20.

3.4 Key Messages from the Literature: Maternal Nutrition and Weight

The National Institute for Clinical Excellence (NICE 2010/14), the Royal College of Obstetricians and Gynaecologists (RCOG 2010) advise both health professionals and expectant women that excessive weight gain should be avoided in pregnancy however advice about how to monitor weight in pregnancy and definition as to what constitutes excessive weight gain is not agreed.

Advice historically has therefore focused on healthy eating during pregnancy rather than weight loss, however the 2017 review of Weight Management During and After Pregnancy by NICE (2017b) suggested eating a diet that may lead to weight loss in someone overweight or obese does not lead to harm.

Advice and information for pregnant women to limit gestational weight gain through healthy eating can impact positively on outcomes for both women and their baby’s ongoing development. Exercising at safe levels in pregnancy can help obese women retain fitness and limit weight gain but diet and combined diet/physical activity have been shown to be a more effective means of reducing weight gain in pregnancy.

Evidence from both a local initiative (below) and the wider literature including a large RCT within study site in Glasgow (Bain, 2015; Poston, 2015) support that intervention on diet and physical activity during pregnancy can limit gestational weight gain.
3.5 Maternal Weight Support Initiatives

In November 2014 a maternal healthy weight intervention Healthy for 2 aimed at preventing excessive weight gain during pregnancy through dietary and physical activity intervention was piloted under the sponsorship of the MINF Group. The intervention was characterised by:

a) Identification of maternal overweight or obesity at booking by the Midwife (BMI>30) and recommendation to engage with Healthy for 2 programme.

b) Telephone motivational intervention undertaken by trained facilitator to ‘triage’ the mother to range of support interventions including:
   - Community Dietetic 1:1 sessions (x4) including risks of weight gain during pregnancy; healthy eating during pregnancy; understanding food labels and practical approaches to healthy cooking; shopping and budgeting.
   - Physiotherapy to address range of musculoskeletal symptoms during pregnancy (accessed as part of existing self referral Obstetric Physiotherapy service)
   - Live Active referral for motivational intervention; physical activity goal setting and follow up support to maintain activity at 3, 6 and 12months

Whilst small numbers (991) the evaluation of the pilot programmes identified that:

- Approx 1/5th (n=165 of overweight expectant mothers engaged with the programme. Engagement was dependant of dedicated motivational support to engage with the programme. The greater the BMI of the expectant mother, the more likely she was to engage with the programme. Approx 1/3rd of participants were first time mothers.
- Of those engaged, most mothers engaged with the Dietetic sessions (56% n=92) and more than half (54%) attended >3 sessions. In addition, 16% (n=26) of expectant mothers engaged with both Dietetic and Live Active elements. 16% engaged only with physiotherapy. Of those mothers (n=47) who engaged with Live Active, one quarter attended for 3 month follow up support and the most popular activities were walking and swimming.
- Participant feedback indicated a strong desire from overweight pregnant women to manage their weight gain during their pregnancy as well as an opportunity to develop a healthier lifestyle for themselves and their baby.
- Feedback from staff indicated behavioural change training and the opportunity to provide a weight management intervention were valued by staff.

Unfortunately only small numbers (n=84) participated and for whom there was a recorded weight at 36 weeks makes it difficult to assess the impact of the intervention. From the data available less mothers (n=8, 26%) exceeded a weight gain of 11-20 lbs during pregnancy when compared to non engagers (n=11, 21%). Engagers also put on significantly less weight (mean=4.02 kg) during pregnancy than their counterparts (mean=7.07 kg).

Following on post pregnancy a New Mum New You intervention was offered to mothers, that Health Visitors felt might benefit from some weight management support. The intervention aimed to support better weight management post partum and provided a 10 week programme of activity classes and weight management support which mothers could attend with their babies.

Findings from the New Mum New You intervention were less encouraging with no significant weight loss associated with participation in the programmes. Of those referred there were high levels of participation (68%=122) and participant feedback suggests provision of activity classes with babies in attendance was highly acceptable and > 95% reported they had improved knowledge, confidence and motivation post intervention to engage in physical
activity, eat healthily and manage their weight more effectively. Opportunity to systematically engage with overweight mothers 6 months post partum require further exploration.

3.6 Way Forward Discussion

Improved weight recording at 36 weeks would enable better analysis of the impact of initiatives to limit weight gain during pregnancy and potential impact on pregnancy related outcomes as described in the literature; the potential impact of avoiding excess weight gain for further pregnancies and in reducing the overall risk of diabetes should be considered in relation to potential outcomes of such initiatives.

BadgerNet should allow improved weight recording throughout pregnancy and the identification of key trigger points (within Badger net) for systematic intervention on healthy weight gain with healthy eating messages throughout the pregnancy journey should be adopted.

The behaviour change training (Raising the Issue) provided to the midwives as part of the Healthy for 2 initiative was appreciated and showed a positive impact on relevance of message, confidence and skills. Participants felt that the issue of obesity had been raised in an appropriate way. Training to support core midwifery staff should therefore include motivational intervention and knowledge of appropriate advice (weight management and physical activity) for overweight pregnant women.

A critical factor for staff when raising the issue of weight is the availability of support services (Bain, 2015; Poston, 2015). Referral pathways to Live Active and Obstetric Physiotherapy developed during the Healthy for 2 pilot have been sustained as core provision but would benefit from focused promotion with midwives as support services for overweight women. Criteria for Community Dietetic referral for pregnant women should be considered.

The majority of pregnant women who sought nutritional advice with a focus on increasing skills, knowledge and confidence to manage their weight gain through practical steps associated with healthy eating. Current resources providing nutritional advice for pregnant women who are overweight at booking should be reviewed.

The benefits of additional engagement support during a proactive appointing process by support services was demonstrated during the pilot and the potential for administration roles to be enhanced with behaviour interventions should be a core element of the approach.

Systematic engagement with post natal mothers (6 months) post partum for weight management support should be routinely made available to women with BMI ≥ 25 at risk of Diabetes/diagnosed with Gestational Diabetes. Women who are at risk of gestational diabetes and identified as planning a pregnancy should be considered for weight management support by clinicians e.g. assisted conception or family planning services.
4. Infant Feeding

The importance of an infant's diet in providing an adequate supply of nutrients and energy during the first year of life is described in MINF 2011 and SACN 2018. Deciding how to feed an infant is an important first decision for new parents and it is important that parents are provided with appropriate information and support to enable them to successfully feed their new born from the antenatal stage.

Within NHSGGC there have been sustained improvements in breastfeeding rates from 2008. The significant health benefits of breastfeeding for both mothers and infants create the ambition to build on this success and drive further improvement in relation to initiation; attrition and duration of breastfeeding across all communities within Greater Glasgow and Clyde.

The factors which influence an individual mother's infant feeding decision are complex and widely reported in the literature. Effective strategies to change broader societal attitudes in favour of breastfeeding and encourage more women to breastfeed thereby establishing breastfeeding as a social norm however are less clear.

The public health challenge to improve breastfeeding rates within the population will require action with both individuals and wider communities.

4.1 Current Position: Prevalence of Breastfeeding

4.1.1 Comparison of Breastfeeding Across Scotland

Across Scotland, 36.4% of babies were exclusively breastfed at the 1st HV visit, the highest mainland Board was Lothian 47.3% (4204) and the lowest Lanarkshire at 22.6% (1503). Within Greater Glasgow and Clyde, 32.6% (3744) mothers exclusively breastfed. NHSGGC was one of the few Boards who saw an increase (1%) from the previous year. Source: ISD 2018

At the 6-8 week review, across Scotland 30.7% of babies were exclusively breastfed and 41.7% mixed feeding. The highest level of exclusive breastfeeding remains Lothian at 41.2% (3506) and the lowest Ayrshire & Arran 18.1% (543). Within Greater Glasgow and Clyde 28.1% (2693) were still exclusively breastfeeding again a small increase from 2017.

Mixed feeding at 1st HV visit (breastfeeding combined with formula feeding) was highest in Lothian at 66 % (5862) and lowest in Lanarkshire 34.6% (2294). In comparison Greater Glasgow and Clyde was 50.2% (5771) of mixed feeding at 1st HV visit and 41 % (2591) mixed feeding at the 6-8 week review compared with national average of 51.3% and 41.7% respectively. A small increase of just over 1% in mixed feeding at both stages was evident in NHSGGC.

Effectively this places NHSGGC in the 'middle of the national pack'.

Scottish Infant Feeding Survey 2017

- Feeding intention prior to giving birth supports high levels of mothers intending to breast feed or provide breast milk to their babies 74% Scotland compared to 77% in GGC.

  Nationally 64% of respondents from the most deprived areas intended to breast feed compared with 82% in the least deprived areas.
• Levels of ‘ever’ breastfeeding suggested that almost three quarters of Scottish mother’s reported giving their baby breast milk at some stage compared with 76% in GGC.

_65% of respondents nationally from the most deprived areas ‘ever’ breastfed compared with 86% in the least deprived areas._

• The prevalence of breastfeeding at 6 weeks is higher amongst women who intended to breastfeed and were exclusively breastfeeding when leaving hospital.

In 2018 the Infant Feeding Programme for Government was launched with the target to reduce drop off in breastfeeding at 6-8 weeks by 20% by 2025.

4.1.2 Breastfeeding within NHSGGC

Whilst recent national comparisons are encouraging, local analysis provides insight into the pattern of breastfeeding within Greater Glasgow and Clyde. Breastfeeding data has been subject to both changes in data definition and data collection systems nationally and locally in the last few years. The best available trend data suggests a sustained improvement of approx 5% from 2013 for NHSGGC. This improvement is mirrored by the data for the most deprived 15% population which is encouraging.

Graph 1: % Exclusive Breastfeeding at 6 To 8 Week by Rolling Year Average NHSGGC And 15% Most Deprived Areas

[Graph showing trend data]

*Source: CHSP Atod Origin / EMIS Web*

Further analysis of the last 3 years suggests that the recent improvement is demonstrated within data for annual quarters, less likely to be artificial and driven principally by improvements within Glasgow City described in table 4 below.

As the review has progressed the local data has greatly improved in both quality and availability. Local data can now be reported for key stages:
Establishing Breastfeeding

At the first feed, the highest proportion of babies exclusively breastfeeding were in the QUEH maternity unit 55.4% (2983) but this dropped to 48.3% (2476) at discharge. The lowest proportion of babies exclusively breastfed were in Inverclyde Royal 38.7% (84) and this dropped to 31.6% (67) at discharge.

Table 4: Type of Feeding In Maternity Units

<table>
<thead>
<tr>
<th>Type</th>
<th>EXCLUSIVE</th>
<th>MIXED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Initiation</td>
<td>1st Feed</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Glasgow PRM</td>
<td>2687</td>
<td>50.2%</td>
</tr>
<tr>
<td>IRH Maternity</td>
<td>94</td>
<td>41.0%</td>
</tr>
<tr>
<td>QEUH</td>
<td>3358</td>
<td>59.0%</td>
</tr>
<tr>
<td>RAH Maternity</td>
<td>1601</td>
<td>51.1%</td>
</tr>
<tr>
<td>VoL Maternity</td>
<td>97</td>
<td>47.8%</td>
</tr>
<tr>
<td>ALL Activity (GHC &amp; Xbou)</td>
<td>7837</td>
<td>53.7%</td>
</tr>
</tbody>
</table>

Source: Badgernet 2018 (All Births)

Whilst the establishment of breastfeeding can be seen to vary across maternity units by site, this will also be influenced by factors such as maternal complexity; age and ethnicity are also acknowledged factors however potential variations in practice should also be considered which may be influencing breastfeeding patterns within NHSGGC.

The availability of robust data for 2017 is limited due to the transition in data systems however SMR data is available for most of the period which when combined with Badgernet data for the remaining months can provide insight into improvements from the previous period. Improved levels of exclusive breastfeeding at discharge appear to be emerging however, sizable increases such as 10% described in table 5 below are not evident at the Health Visitor 1st Visit (4%). As a result caution should be applied to the data and further monitoring will confirm levels of improvement.

Table 5: Exclusive Breastfeeding At Discharge By Maternity Units

<table>
<thead>
<tr>
<th>Type</th>
<th>BADGER 2018</th>
<th>SBR 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discharge</td>
<td>Discharge</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Glasgow PRM</td>
<td>1864</td>
<td>37.6%</td>
</tr>
<tr>
<td>IRH Maternity</td>
<td>67</td>
<td>31.6%</td>
</tr>
<tr>
<td>QEUH</td>
<td>2476</td>
<td>48.3%</td>
</tr>
<tr>
<td>RAH Maternity</td>
<td>1214</td>
<td>41.9%</td>
</tr>
<tr>
<td>VoL Maternity</td>
<td>75</td>
<td>42.1%</td>
</tr>
<tr>
<td>ALL Activity (GHC &amp; Xbou)</td>
<td>5696</td>
<td>42.6%</td>
</tr>
</tbody>
</table>

Source: Badgernet 2018 / SBR 2017 (All Births)

Drop Off and Attrition

From those 6829 mothers exclusively breastfeeding at the first feed in 2018 (49.3%), 5696 (42.6%) mothers remained exclusively breastfeeding at discharge. The drop off is recorded as 16.6%.
With regards to mixed feeding, it is notable that on some sites levels of mixed feeding increase from first feed to discharge suggesting that initial delays in establishing feeding can be overcome.

Levels of mixed feeding over the last 3 years look to have shown approx 6% increase from 46.4% in 2016 to 52.2% in 2018 this is higher than exclusive breastfeeding increase of 4 % when considering data from HV 1st Visit (Graphs 4 and 5 below).
Breastfeeding continues to be patterned by deprivation and analysis of GGC residents by deprivation quintiles reflects this with 42.2% of mothers in most derived communities initiating breastfeeding compared with 73.5% in least deprived areas. This pattern is reflected at each stage. Table 6 below.

Table 6: Type of Feeding in by Deprivation

| SIMD Quintile | EXCLUSIVE | | | | MIXED | | |
| | Initiation | 1st Feed | Discharge | 1st Feed | Discharge | 1st Feed | Discharge |
| | n | % | n | % | n | % | n | % |
| SIMD1 (Most Depressed) | 2074 | 42.2% | 1745 | 37.5% | 1373 | 30.6% | 1921 | 41.2% |
| SIMD2 | 1003 | 52.2% | 866 | 47.1% | 702 | 39.5% | 937 | 51.0% |
| SIMD3 | 893 | 60.6% | 776 | 54.9% | 638 | 47.1% | 842 | 59.5% |
| SIMD4 | 947 | 64.7% | 858 | 61.1% | 743 | 54.6% | 914 | 65.1% |
| SIMD5 (Least Deprived) | 1452 | 73.5% | 1312 | 69.5% | 1191 | 65.2% | 1386 | 73.4% |
| NHSGGC Total | 6369 | 54.2% | 5557 | 49.6% | 4647 | 43.0% | 6000 | 53.6% |

Source: Badger 2018 (GGC only residents)

The overall drop off between first feed and discharge is also associated with deprivation with 90% of breastfeeding mothers from the most affluent areas continuing to feed at discharge compared with 78.6% in SIMD 1.

Table 7: Type of Feeding by HSCP

| Local Area | 2016 | 2017 | | | 2018 | 2019 | |
| | 1st Visit | 6 to 8 Week | 1st Visit | 6 to 8 Week | 1st Visit | 6 to 8 Week | 1st Visit | 6 to 8 Week |
| East Dun | 470 | 44.0% | 416 | 39.1% | 443 | 41.4% | 385 | 35.8% |
| East Ren | 398 | 42.0% | 355 | 37.5% | 402 | 43.6% | 375 | 40.3% |
| Glas City | 1794 | 29.3% | 1555 | 25.7% | 1908 | 32.0% | 1555 | 28.9% |
| Glas City NE | 418 | 22.9% | 331 | 18.3% | 478 | 25.0% | 370 | 19.7% |
| Glas City NW | 609 | 33.2% | 551 | 30.7% | 686 | 38.6% | 586 | 33.9% |
| Glas City South | 707 | 31.2% | 673 | 27.5% | 832 | 32.5% | 690 | 27.5% |
| Inverclyde | 112 | 18.8% | 97 | 14.3% | 129 | 20.2% | 103 | 18.9% |
| Ren | 497 | 28.8% | 399 | 23.0% | 489 | 27.9% | 409 | 23.4% |
| West Dun | 196 | 22.3% | 157 | 17.7% | 172 | 20.2% | 138 | 16.2% |

Source: EMIS

The greatest concentration of SIMD 1 communities is within Glasgow City and over the last three years the percentage of mothers exclusively breastfeeding at 6-8 weeks has increased in North East; North West and South localities of Glasgow.

Transition to Health Visiting

Attrition is well documented at the key transition between community midwife discharge and Health Visitor first visit. Data sources also change at this point.

As described above, the overall percentage of mothers breastfeeding at First Visit have improved over the last 3 years and similar improvements are also evident at 6-8 weeks (Graph 4 below).
A similar pattern of improvement can be seen in relation to mixed feeding (graph 5 below).

**Breastfeeding by HSCP**

Analysis of mothers exclusively breastfeeding by HSCP of residence allows some understanding of feeding at first visit. Numbers exclusively breastfeeding at 6-8 weeks within Glasgow City indicate a positive direction of travel over the last 4 years. Similar improvement is also evident in Renfrewshire and West Dunbartonshire although to a lesser extent with a slight drop in more recent data. Improvements within the same time period are not evident within Inverclyde with the lowest levels of breastfeeding at 17%.
Continuation of Breastfeeding

A more detailed analysis based on exclusive breastfeeding at Health Visitor first visit (approx day 10) and numbers feeding at 6-8 weeks highlights the variation at each stage by HSCP. Whilst overall numbers of mother exclusively breastfeeding over the last 3 years at 1st visit and 6-8 weeks have increased from 1642 to 1910 the drop off has actually increased between the stages from 20.2% to 22.8% across NHSGGC.

Table 8: Infant Feeding Rates by HSCP and SIMD Quintile and Feeding Type

<table>
<thead>
<tr>
<th>Local Area</th>
<th>2016 Number Breastfed at 1st HV Visit</th>
<th>2016 Number Breastfed at 6-8 Week Review</th>
<th>Drop off (2016)</th>
<th>2017 Number Breastfed at 1st HV Visit</th>
<th>2017 Number Breastfed at 6-8 Week Review</th>
<th>Drop off (2017)</th>
<th>2018 Number Breastfed at 1st HV Visit</th>
<th>2018 Number Breastfed at 6-8 Week Review</th>
<th>Drop off (2018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Dun</td>
<td>622</td>
<td>522</td>
<td>-16.1%</td>
<td>639</td>
<td>530</td>
<td>-17.1%</td>
<td>543</td>
<td>454</td>
<td>-16.4%</td>
</tr>
<tr>
<td>East Ren</td>
<td>574</td>
<td>500</td>
<td>-12.9%</td>
<td>597</td>
<td>513</td>
<td>-14.1%</td>
<td>577</td>
<td>481</td>
<td>-16.6%</td>
</tr>
<tr>
<td>Glass City</td>
<td>2916</td>
<td>2440</td>
<td>-16.3%</td>
<td>3256</td>
<td>2647</td>
<td>-18.7%</td>
<td>3494</td>
<td>2874</td>
<td>-17.7%</td>
</tr>
<tr>
<td>Glass City NE</td>
<td>680</td>
<td>544</td>
<td>-20.0%</td>
<td>779</td>
<td>604</td>
<td>-22.5%</td>
<td>807</td>
<td>720</td>
<td>-19.7%</td>
</tr>
<tr>
<td>Glass City NW</td>
<td>976</td>
<td>841</td>
<td>-13.8%</td>
<td>1065</td>
<td>899</td>
<td>-15.6%</td>
<td>1149</td>
<td>975</td>
<td>-15.1%</td>
</tr>
<tr>
<td>Glass City South</td>
<td>1269</td>
<td>1055</td>
<td>-16.3%</td>
<td>1412</td>
<td>1144</td>
<td>-19.0%</td>
<td>1448</td>
<td>1179</td>
<td>-18.6%</td>
</tr>
<tr>
<td>Inverclyde</td>
<td>168</td>
<td>134</td>
<td>-20.2%</td>
<td>192</td>
<td>141</td>
<td>-26.0%</td>
<td>196</td>
<td>137</td>
<td>-29.4%</td>
</tr>
<tr>
<td>Ren</td>
<td>740</td>
<td>583</td>
<td>-21.2%</td>
<td>733</td>
<td>566</td>
<td>-22.0%</td>
<td>704</td>
<td>571</td>
<td>-25.3%</td>
</tr>
<tr>
<td>West Dun</td>
<td>273</td>
<td>219</td>
<td>-19.8%</td>
<td>275</td>
<td>195</td>
<td>-29.1%</td>
<td>317</td>
<td>223</td>
<td>-29.7%</td>
</tr>
<tr>
<td>NHSGGC TOTAL</td>
<td>1642</td>
<td>1310</td>
<td>-20.2%</td>
<td>1876</td>
<td>1484</td>
<td>-22.0%</td>
<td>1910</td>
<td>1475</td>
<td>-22.8%</td>
</tr>
</tbody>
</table>

Source: EMIS

Whilst GGC as a whole has higher levels of deprivation than other Health Boards, individual local authorities have some of the most deprived communities in the UK. Despite this Graph 7 below indicates that over time there has been a slight increase in breastfeeding within most HSCP areas at 6-8 weeks. The exception is Inverclyde HSCP which remains the lowest, without improvement in 2018.
Graph 7: Breastfeeding at 6-8 Weeks by HSCP

Source: EMIS 2016 to 2018 Calendar Years, GGC Residents

- **Reducing Drop Off between 1st Visit and 6-8 weeks**

‘Ever Breastfed’ data is available at a national level and indicates a drop off from mothers reporting to have ‘Ever Breastfed’ to those recorded as feeding at 1st visit of 15.6% and by 30.9% at 6 to 8 Weeks (ISD CHSP 2018).

However to drive internal improvement local data for drop off between 1st visit and 6-8 weeks provides the most reliable data and are available on a quarterly basis. Breakdown by HSCP indicates the areas where most significant improvement is required over the next 5 years. Locally the drop off in some partnerships varies from 15% in NW Glasgow to 30% in West Dunbartonshire and Inverclyde.

A 20% reduction in attrition at 6-8 weeks is the key policy directive from the Scottish Government.

Graph 8: Breastfeeding Drop off by HSCP 1st to Visit to 6-8 Weeks

Source: EMIS
Duration of Breastfeeding to 6 Months

Infant feeding data beyond 6-8 weeks is available within the EMIS system and analysis will be undertaken to identify duration of breastfeeding along with that age at which complimentary feeding is introduced (weaning) going forward.

Breastfeeding in Neonatal Babies

In the year ending 31 March 2016, 8.7% of babies born in NHSGGC were preterm (<37 weeks gestation). This was marginally higher than the figure for all Scotland. In NHSGG, 7.9% (n=970) of babies were of low birth weight with 1% (n=122) weighing less than 1500g. (ISD, 2017)

Breastfeeding rates on discharge from neonatal units are regularly monitored as part of the Neonatal Audit Programme run by the Royal College of Paediatrics and Child Health enabling national benchmarking. From 2015 the numbers of admissions receiving breast milk at discharge has improved with between 50%-60% across NHSGGC neonatal units.

Graph 9: Proportion of Babies Admitted to a NNAP Participating Unit with Gestation at Birth less than 33 Weeks who Received any of their Mother’s Milk at Discharge (Excludes Babies Transferred to or from the Unit)

4.1.3 Breastfeeding Investment and Impact on Breastfeeding Rates

Actions to support breastfeeding across NHSGGC have benefited from national funding from CEL 36 and the Maternal and Infant Nutrition Framework allocations. The table below shows the changes in breastfeeding rates during the associated funding periods. The exclusive breastfeeding rate at birth has increased from 39.6% in 2010 to 50% in 2016 and a similar increase is seen at the 6-8 weeks assessment – 13.9% to 25.3%. The dip at each recorded stage in 2012 figures is worthy of further exploration.
Table 9: Breastfeeding Investment (National)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding Period</td>
<td>CEL 36 – 2008 to 2011</td>
<td>MINF from 2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BF Ex at birth</td>
<td>39.6%</td>
<td>42.4%</td>
<td>37.6%</td>
<td>41.1%</td>
<td>47.5%</td>
<td>50.0%</td>
</tr>
<tr>
<td>BF Ex at discharge</td>
<td>28.6%</td>
<td>30.6%</td>
<td>27.8%</td>
<td>29.4%</td>
<td>36.2%</td>
<td>37.5%</td>
</tr>
<tr>
<td>BF Ex at HVFV</td>
<td>21.0%</td>
<td>23.5%</td>
<td>20.4%</td>
<td>21.9%</td>
<td>30.1%</td>
<td>31.2%</td>
</tr>
<tr>
<td>BF Ex at 6-8 weeks</td>
<td>13.9%</td>
<td>15.7%</td>
<td>13.1%</td>
<td>17.0%</td>
<td>24.6%</td>
<td>25.3%</td>
</tr>
</tbody>
</table>

Source: Child Health Surveillance System. ATOS 2017

4.1.4 Breastfeeding Targets

In line with the National target to reduce breastfeeding attrition from ‘Ever Breastfed’ to ‘breastfeeding’ at 6-8 weeks by 20% by 2025. The modelling based on ISD formula and ISD 2017/18 data provides a projection to achieve the 20% reduction across NHSGGC.

Table 10: Reduction in Attrition to achieve National Target

<table>
<thead>
<tr>
<th>Local Area</th>
<th>2018 Drop off Rate</th>
<th>20% reduction over 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Dun</td>
<td>-16.4%</td>
<td>-3.3%</td>
</tr>
<tr>
<td>East Ren</td>
<td>-16.6%</td>
<td>-3.3%</td>
</tr>
<tr>
<td>Glas City</td>
<td>-17.7%</td>
<td>-3.5%</td>
</tr>
<tr>
<td>Glas City NE</td>
<td>-19.7%</td>
<td>-3.9%</td>
</tr>
<tr>
<td>Glas City NW</td>
<td>-15.1%</td>
<td>-3.0%</td>
</tr>
<tr>
<td>Glas City South</td>
<td>-18.6%</td>
<td>-3.7%</td>
</tr>
<tr>
<td>Inverclyde</td>
<td>-29.4%</td>
<td>-5.9%</td>
</tr>
<tr>
<td>Ren</td>
<td>-25.3%</td>
<td>-5.1%</td>
</tr>
<tr>
<td>West Dun</td>
<td>-29.7%</td>
<td>-5.9%</td>
</tr>
<tr>
<td><strong>NHSGGC TOTAL</strong></td>
<td><strong>-22.8%</strong></td>
<td><strong>-4.6%</strong></td>
</tr>
</tbody>
</table>

Source: EMIS

4.1.5 Data Challenges and Opportunities

Previously breastfeeding data was sourced from the Scottish Birth Records System and the Child Health Surveillance Programme and reported by ISD. Local data is now collected within maternity services using Bagernet. This data is not currently used by ISD for national reporting, however enables local analysis of infant feeding data throughout the antenatal/postnatal stage until handover to Health Visitor Teams.

Health Visiting data is collected using EMIS, with complete records being uploaded to the national Child Health Surveillance Programme. Child Health Reviews offered to all babies at the 1st HV visit and then at the 6-8 week review.

In February 2016 the national measures for breastfeeding changed to include a reference point of ‘Ever Breastfed’ based on retrospective reporting and an indication of ‘drop off’ can be calculated at First Visit and 6-8 Weeks stages from this point.

The most consistent measure remains levels of exclusive breastfeeding at all stages and where possible this should provide indications of longer term trends.

An Infant Feeding ‘dashboard’ is currently in development and will provide consistent data analysis across NHSGGC to support continuous improvement within service areas. The dashboard will be provided via the Central Information System for NHSGGC.
4.2 Key Messages from the Data (Summary)

- Overall NHSGGC is in the ‘middle of the Scottish pack’ for exclusive breastfeeding.
- The best available data suggests a 5% improvement from 2013 at 6-8 weeks.
- Just over half of mothers initiate breastfeeding just under half feeding at 1st feed.
- Breastfeeding rates vary across maternity sites with an average drop off of 16.6% between 1st feed and discharge.
- Mixed feeding can increase between first feed and discharge suggesting establishing breastfeeding can still be achieved with appropriate support.
- Breastfeeding at discharge looks to have improved between 4% and 10% depending on data sources.
- Breastfeeding is patterned by deprivation at all stages including the levels of drop off in exclusive feeding.
- Improvements in breastfeeding rates in deprived communities (15% most deprived) are similar to improvements in the wider population.
- The overall percentage of mothers breastfeeding at 1st visit has improved and breastfeeding at 6-8 weeks has also improved.
- Increased numbers of mothers breastfeeding at 6-8 weeks in most HSCPs.
- The increase in numbers breastfeeding at 1st visit to 6-8 weeks are not sustained with attrition / drop off increasing in most HSCPs from 2016. In 2018 drop off in NHSGGC was 22.8%.

4.3 BFI Standards

The NHS position is underpinned by international consensus enshrined in the UNICEF Baby Friendly Initiative (BFI) programme that conforms to recommendations made by the World Health Organisation (WHO). The Baby Friendly Initiative requires healthcare premises to adopt evidence-based best practice standards in order to achieve the Baby Friendly Award. It was developed to ensure that midwives and health visitors are equipped with the basic knowledge and skills they need to support breastfeeding effectively and that there is no promotion of breastmilk substitutes, bottles, teats or dummies in any part of the facility or by any of the staff.

BFI Standards are reflected in the various guidance reviews and practice statements that inform service activity and relevant professional bodies in the UK including: Royal College of Midwives, 2012; NICE, 2014, 2015; Royal College of Nursing, 2016; 2017; RCPCH, 2017.

The literature identifies the benefits of the structural support provided by the standards and the positive impact on initiation and duration of breastfeeding however the underlying mechanisms for this impact remain unclear (Munn et al. 2016).

Levels of BFI implementation are high within NHSGGC and all maternity services and relevant educational institutions serving NHSGGC have reached either full or Stage 2 (BFI) accreditation. Community teams (HSCPs) are successfully progressing sustainability gold award. Commitment to maintaining BFI standards is fully supported by this review.

Consideration as to ‘how’ we best deliver the BFI standards is an inherent aspect of the report and considerations regarding how best to support progression to UNICEF UK’s Achieving Sustainability BFI Standards to achieve the Gold Award for maternity units is also considered. Ongoing engagement with UNICEF colleagues to consider aspects of this report is encouraged.
4.3.1 BFI Standards Maternity

At the time of the review the co-ordination of the BFI programme was undertaken by the Infant Feeding Advisor team lead. The programme forms an integral part of the work of the Maternity Infant Feeding Team both underpinning policy and practice of the team as well as driving a substantial part of the workload.

NHSGGC is currently in the reassessment phase of the BFI Standards which requires an extensive programme of audit activity to ensure the maintenance of standards in line with BFI, including continued implementation, evaluation and audit of care standards. The internal audit programme is detailed below. This audit activity is currently carried out by the IFAs. The programme comprises the regular audit of Staff; Mothers and Supplementation rates at levels specified by UNICEF with the achievement of a minimum threshold in order to maintain accreditation.

Table 11: Maternity / Neonatal BFI Audit Requirements

<table>
<thead>
<tr>
<th></th>
<th>Re-assessment</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Numbers</td>
</tr>
<tr>
<td>MOTHERS</td>
<td>Six monthly</td>
<td>10-20 (up to 3000 births)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20-30 (3000+ births)</td>
</tr>
<tr>
<td>Mothers*</td>
<td>Quarterly</td>
<td>10-20 (up to 3000 births) as above</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20-30 (3000+ births)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Plus 6 mothers with a baby on NNU</td>
</tr>
<tr>
<td>Supplement audit</td>
<td>Ongoing for all mothers</td>
<td>all supplements given to babies - approx 70 supplements per month.</td>
</tr>
<tr>
<td>Environment (Code and information e.g. Bounty Bags)</td>
<td>Six monthly</td>
<td>All areas</td>
</tr>
</tbody>
</table>

There are 15 Standards audited internally (and as part of external audit) with a further 15 aspects of supplementation audited through case note and maternal interviews.

Within NHSGGC all supplements given to babies are investigated as part of the audit process - approx 70 supplements per month a quarterly report is submitted to local BFI meetings and action plans implemented to reduce supplementation.

Infant Feeding Advisors estimate that each element of audit takes approximately 30 mins however this can be extremely variable and may include an element of debriefing mothers when care has not met the standards expected.
The internal audit activity within each maternity unit comprises approximately 435 hrs audit per year or approx 4 weeks audit per unit/ year.

Anecdotal feedback on the impact of the audit cycle suggests there are an associated increase in both breastfeeding at discharge with a reduction in breastfeeding clinic attendance by mothers from the associated units suggesting the increased focus of the audit cycle and input from the IF team has a positive effect on care and standards.

Breastfeeding data for the time periods linked to the BFI External Audit programme does not bear out the anecdotal feedback. In part this is due to lack of sensitivity of data period. It is a realistic expectation that audit activity would improve practice and future monthly data should only be provided to measure impact more directly. Table 12 below.

Data from the internal hospital audits below were not available for analysis by the Public Health Team.

Table 12: BFI Audit and Breastfeeding Rates

<table>
<thead>
<tr>
<th>Maternity Unit</th>
<th>UNICEF assessment period</th>
<th>Period before assessment</th>
<th>Period following assessment</th>
<th>Current BF data @ birth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vale of Leven</td>
<td>Oct 2014</td>
<td>Oct 13/Sep 14</td>
<td>Apr 14/Mar15</td>
<td>Jan./Dec 15 63.3%</td>
</tr>
<tr>
<td>IRH</td>
<td>Oct 2014</td>
<td>Oct 13/Sep 14</td>
<td>Apr 14/Mar15</td>
<td>Jan/Dec 15 45%</td>
</tr>
<tr>
<td>Paisley</td>
<td>Oct 2014</td>
<td>Oct 13/Sep 14</td>
<td>Apr 14/Mar15</td>
<td>Jan/Dec 15 42.7%</td>
</tr>
<tr>
<td>PRM</td>
<td>Sept 2015</td>
<td>Jan 14/Dec14</td>
<td>Jul 14/Jan 15</td>
<td>Jan/Dec 15 42.2%</td>
</tr>
<tr>
<td>QUEH</td>
<td>May 2015</td>
<td>Jan/Dec 14</td>
<td>Jul 14/Jan 15</td>
<td>Jan/Dec 15 59.1%</td>
</tr>
</tbody>
</table>

Source: Child Health Surveillance Programme ATOS

4.3.2 BFI Standards Community

By March 2019, East Dunbartonshire; West Dunbartonshire; East Renfrewshire and Inverclyde and North East Glasgow Health and Social Care Partnerships have achieved the BFI Gold Award with the adoption of a sustained approach to BFI Standards. NW and South Glasgow are awaiting the outcome of assessment and the final area Renfrewshire being assessed in Oct 2019.

Table 13: Community Internal Audit Requirements for Gold
Within community, the role of the IFA in supporting the accreditation and assessment process is different in different HSCPs with the IFA supporting a local manager and key workers in each HSCP/sectors to lead the audit process. However in some areas (most notably WD and IC) the IFA provides mainly project management support for the accreditation and assessment process with the audit process undertaken by other trained staff with dedicated time. In other HSCPs part or all of the audit work is still undertaken by the IFA. As the reassessment process is replaced with an ongoing audit programme. There may be a reduction in the amount of audit activity required and therefore potential release of IFA capacity within communities going forward.

Prior to the Gold award, again assuming 30mins for each audit element then approx 85 – 112 hours of staff time was spent on auditing in each partnership in addition to preparatory time to organise staff lists and venues as well as time taken by Child and Family staff to consent mothers and admin staff to produce consent registers.

➢ Challenges and Opportunities

The BFI audit cycle is labour intensive and largely reliant on the IFA resource.

The approach currently taken to prepare for external assessment effectively sees the intensive deployment of IFAs to the scheduled sites for a number of weeks in advance of assessment.

In addition to internal audit data the external reassessment process involves further case note reviews and interviews with staff and both breastfeeding and formula feeding mothers both of which require to achieve a minimum pass rate of 80% (or specific benchmark).

A challenge identified in relation to the BFI audit process is the current paper based approach and opportunities to introduce eHealth solutions to administer the audit process would create potential for more efficient practice. A mapping of Badger Net data and BFI audit data is suggest potential for eHealth development to facilitate auditing activity.

The recording of all supplementation activity is thought by midwifery colleagues to contribute to wider environmental support on the ward helping to reduce the level of unplanned switches to formula milk. Alignment of Supplementation BadgerNet data and BFI audit data is an example where duplication and variation can be reduced.

4.4 Way Forward Discussion

The benefits of a structured approach to infant feeding across NHSGGC (at unit or HSCP level) provided by the BFI Standards are recognised and good progress is being made towards sustainability. The application of aspects of the accreditation and sustainability process however need further consideration to build on the good work and optimise the approach.

Opportunities to streamline the audit process should be explored and discussed with Scottish Government/UNICEF. The audit approach is just one aspect of the BFI standards and whilst the benefits of the audit activity are difficult to measure audit is an established approach to maintaining standards and driving an improvement cycle. However the opportunity cost of undertaking audit using specialist Infant feeding capacity should be noted i.e. impact on the provision of direct care interventions; practice development or training and development.

A skill mix approach to audit has been previously tested in Clyde and there is the potential to develop this as a discreet activity within the Maternity Care Assistant role going forward.
releasing capacity from the specialist team. Learning from HSCPs where a skill mix approach to audit activity should also be extended across Partnerships.

Ownership for the delivery of the standards needs to be embedded within the operational maternity unit and child and families team structures locally to facilitate local leadership. Building capacity to mentor staff to undertake audit as well as utilising audit data to support performance monitoring should be strengthened in local teams.

The extent to which ownership currently exists is a contested issue for stakeholders in different parts of NHSGGC. However discussions with stakeholders have identified actions which would strengthen local ownership. These include:

- Introduction of an Infant Feeding performance monitoring approach (dashboard) comprising the routine breakdown of data (BFI audit and BadgerNet) at Unit / Ward level and maternity pathway stage and similar data (BFI audit and EMIS) by HSCP and Universal Pathway stage. Data driven improvement cycles should be routinely monitored by local management teams.
- Local innovation to develop enhanced practice roles for midwives / HVs or opportunities to develop structured tests for change to address issues raised through this review were also recognised as creating local ownership and supporting organisational learning.
- Refreshing and strengthening where required, of operational arrangements to support the delivery of BFI standards and promote the role of Breastfeeding Champions/Guardians in each area / service.

NHSGGC should progress to BFI sustainability through the Gold Award in all organisational entities. The MINF group should retain overview of local progress and facilitate whole system learning and development where appropriate to support implementation.

A business management review should be undertaken to ensure full use of eHealth systems Badger/EMIS are employed to support BFI requirements including ongoing audit information. Dialogue with UNICEF and Scottish Government would be beneficial in this regard.

4.5 Key Messages from Literature: Breastfeeding

4.5.1 Initiating Infant Feeding Choices

The fundamental aim of infant feeding support should be to help all mothers/families to feel positive and become confident in feeding their infant regardless of feeding choice.

A mother’s decision on how to feed their baby is influenced by a range of factors; the views of family, friends, and professionals and are taken against a complex cultural background. Decisions are not taken lightly, are often emotional and perceived as value-laden. Women can feel pressure to defend their feeding choices as part of creating the family environment that works for them.

The recent SACN Report (2018) reinforces the benefits of breastfeeding for maternal and infant health as well as recognising lifelong health benefits. The continuation of breastfeeding for the recommended 4-6 months provides adequate energy and does not constrain infant growth. The contribution of breastfeeding to infant health maybe limited by the amount of breast milk consumed and risks associated with the introduction of other milks or foods. Patterns of breastfeeding are patterned by parental social and educational inequalities.
Recognition of the impact of family support for breastfeeding is well documented and midwives describe the benefits of identifying a key family member or friend who has previously breastfed as influential in establishing breastfeeding.

Multiple studies to support the benefits of strengthening of an infant feeding approach from the antenatal stage linked to further key stages of the maternal journey. Antenatal feeding intentions are indicative of early feeding practice. Learning from the Build Your Baby initiative (Dougall 2014) suggests benefit in linking antenatal infant feeding discussions with the provision of support for all mothers who wish to breastfeed as a minimum.

Interventions most effective in increasing the initiation and duration of breastfeeding within the literature are based on multiple contacts throughout the maternal journey (or maternity care pathway); starting in the antenatal setting and continuing through maternity units to home based / face to face interventions in postnatal period within the community (Mcfadden et al 2017).

Breastfeeding interventions therefore may be more effective if focussed on those who express an early intention to feed but are less likely to make a difference for mothers who have expressed negative attitudes to breastfeeding from the antenatal period (Dougall 2014).

Recent literature describes the importance of subtle aspects of the support provided and concepts such as ‘mastery of normal feeding challenges’ such as those proposed within Stockdale et al 2014 should be considered within antenatal interventions.

The opportunities provided by the development of ‘shared care’ within the antenatal pathway have yet to mature but the focus on improved continuity of care with early Health Visitor contact reinforces the ‘authentic relationship’ described in the literature.

4.5.2 Infant Feeding Support

➤ Establishing Breastfeeding

Interventions to support infant feeding in the early days and weeks are predominantly focussed on establishing breastfeeding. Postnatal support in hospital whether opportunistic or in response to emerging difficulties can improve rates of breastfeeding from birth and at discharge.

Inherently the role to establish breastfeeding lies with the maternity units and literature such as Kaunonen et al 2012 acknowledges the need for infant feeding support within the hospital stage ahead of community.

For mothers and babies whose hospital stay is longer, in particular those requiring neonatal support a more intensive support model is desirable due to the widely accepted health benefits of breast milk for the patient group. The use of donor milk in neonatal intensive care units (NICU) can increase breastfeeding rates at discharge for very low birth weight infants.

➤ Sustaining Breastfeeding

The interventions most effective in increasing the initiation and duration of breastfeeding within the literature are based on multiple contacts throughout the maternal journey (or maternity care pathway); starting in the antenatal setting and continuing through maternity units to home based / face to face interventions in postnatal period within the community.
The support offered maybe by professional or trained peer supporters or a combination of both (Mcfadden et al 2017).

The importance of developing a trusting relationship or authentic presence with the infant feeding supporter throughout these stages is also emphasised (Schmeid et al 2011).

Whilst the evidence includes effective interventions delivered by Infant Feeding Support Worker or similar trained peer roles there is much variation in how the interventions are delivered. Most literature (McFadden 2017; Kaunonen 2012) reinforces the provision of structured support (combined professional and peer support) linked to all stages of the maternity care pathway. Some Scottish examples include delivery through third sector agencies but again linked to the maternity pathway.

Interventions that follow up antenatal and postnatal support in hospital with home visits were more likely to report impact; one such model saw a significant increase in breastfeeding at 6-8 weeks (NHS Tayside 2006). There is less evidence that community based support alone extends breastfeeding duration.

Evidence from the literature combined with learning from local models suggest that the most effective, evidence-based strategy is a combination of health professional and trained volunteer delivering support to women from the antenatal period through hospital stay and into the postnatal weeks at home.

Individual peer support in the postnatal period is more commonly described in the literature than support groups. Published evidence to support the effectiveness of peer support is mixed. Some models of peer support tested in Scotland showed promising results such as Dalzell 2014.

Recent literature describes quite subtle elements of the scope of the infant feeding support provided and concepts such as ‘mastery of normal feeding challenges’ such as those proposed within Stockdale et al 2014 suggest preparing both mothers and the core workforce to anticipate and expect to resolve common feeding problems can improve breastfeeding outcomes.

> **Mixed Feeding**

Mixed feeding is increasing in NHSGGC suggesting that more women want their baby to receive some breast milk. Professional concerns relate to the duration of mixed feeding and the risks associated with transition to formula at an early stage.

The importance of maintaining breastfeeding and maintaining the volume of breast milk, highlighted in the SACN report need to be considered in the context of increasing patterns of mixed feeding.

The problems of a binary approach to feeding practice, recognising that the majority of mothers will have introduced milk other than breast milk before 6 months are discussed in the literature (Trickey and Newburn 2012) and require clear direction to maintain breastmilk for as long as possible.

Professionals should have clear and agreed mixed feeding advice in order to communicate accurately to mothers.
4.6 Breastfeeding Support: Antenatal

It is recognised that further work is required to scope this stage more fully in relation to establishing both the current position within the antenatal pathway and identifying opportunities for improvement associated with the introduction of shared areas as part of the New Universal HV pathway.

The implementation of the Best Start Programme will consider the redesign of antenatal education and this presents an opportunity to revisit infant feeding within the antenatal programme. The consideration of multi disciplinary roles (Maternity Care Assistants / Infant Feeding Support Workers) within the delivery of antenatal education could also be considered in similar models to other Health Boards. The proactive provision of infant feeding support for all mothers regardless of feeding practice is advocated by UNICEF 2017. Learning from the Build a Baby programme (Dougall 2014) remains relevant and intention to breastfeed one of the strongest determinants of future feeding. The extent of implementation of lessons from Build a Baby should be further explored.

Discussions with key stakeholders have identified the need to improve communication and care planning in relation to infant feeding from the antenatal stage. The adoption of a simple infant feeding plan within the antenatal pathway to support continuity of care and enable a person centred approach throughout the maternity/ universal pathway should be tested.

4.7 Breastfeeding Support: Maternity and Community

Breastfeeding support is provided by the Infant Feeding Team. The role of the infant feeding team extends to both maternity and community settings and supports the delivery of BFI standards as described in Appendix 3;

The Infant feeding team are currently managed through three NHSGGC entities (Maternity services / Glasgow HSCP / Renfrewshire HSCP) but largely operate as a collective team working across different management arrangements. This collaborative approach has maintained Board wide co-ordination and delivery of BFI training programmes and breastfeeding clinics and has been fundamental in ensuring the continuation of service delivery in the context of reducing resources. (See Section 6 for an outline of current workforce).

4.7.1 Training

The current training programme is targeted both at core staff in midwifery, neonatal and Child and Family Teams (staff are required to complete BFI training every 3 years and achieve a threshold of 80% satisfactory completion) and comprises a combination of knowledge based information; practice based information and skill development based on a local adaption of the BFI Curriculum (Unicef UK BFI, 2017).

Induction training for new starts requires to be completed within 6 months of employment and is followed up with a further period of mentorship and skills based assessment. This supports practice with a focus on practical skills, pump use, early expressing, using assessment tools and monthly one hour updates on labour wards to support early expressing.

Current responsibility for maintaining staff training levels lies with both individual staff (registration) and team leads/ practice development nurses/ neonatal practice educators (acute, neonatal and community) who currently maintain local records for staff attending training. This data was not readily available for review and is not compiled on a GGC basis.
An attendance database compiled by the IFAs had not been maintained due to lack of Admin support at the time of the initial review.

The schedule of training delivered by IFAs based in both maternity and community maximising the use of current capacity but also maintaining the expertise led training skills of the team.

In 2017 approximately 60 days of training was scheduled most of which require 2 members of the IFA team to deliver as increasingly larger groups of staff are being trained over fewer sessions. A minimum of 120 days is currently allocated to training with additional mentoring time. Training includes: Induction (support staff/ trained staff and medical staff); Midwifery updates; HV updates; Neonatal update; Public acceptability BFI audit (community and acute); BFI Mentoring (community and acute)

Whilst the impact of the training programme has not been evaluated, training is subject to audit as part of the BFI standards and maintenance of the award. All units must maintain training for 80% of staff every 3 years to maintain the BFI standards. NHS GG&C has been BFI accredited for 15 years.

UNICEF audit data indicates high levels of knowledge based skills amongst staff. Recent reassessments indicate high levels of knowledge of good practice. The Clyde external assessment showed excellent levels of staff knowledge with plans to move towards sustainability through BFI gold award accreditation.

A review of Community Audit data provided in 16/17 indicated that most localities exceed greater than 80% benchmark in all areas of the audit. However areas which would benefit from further improvement are identified below:

- The key principles of positioning
- Support with hand expressing
- What is meant by responsive feeding
- The importance of closeness and comfort and enhancing responsiveness
- How to ensure baby gets the right amount of milk (bottle feeding)

➢ **Challenges and Opportunities**

Within Maternity Services concerns regarding sustainability and spread of mentoring provision were identified. Arrangements for mentoring should be reviewed within each Unit with considerations to the wider skill mix across maternity teams.

A similar challenge is identified in building capacity within maternity services to expand and embed the mentoring and auditing roles within local teams.

Within Community Services engagement with wider practice development approaches has been established in some HSCPs with Breastfeeding embedded into wider roles in the form of BF Mentors; BF Auditors and Facilitators. This is a positive development but requires further expansion linked to the additional capacity planned within Health Visiting Teams as part of the New Health Visiting Pathway. Building mentoring capacity would benefit from an increased focus in order to maintain and expand both the number and the skill level of mentors for this new workforce.

➢ **Way Forward**

A number of national events have focused on the development of national training resources (including e-training modules; training for trainers; mentor development). In March 19 the Scotland-wide training package is still unavailable however the current
approach to training within NHSGGC will require to be reviewed in line with national developments.

4.7.2 Breastfeeding Clinics / Frenotomy

Support to address breastfeeding problems is provided in the form of IFA led clinics within NHSGGC.

During 2017 there were 2 clinics operating across NHSGGC for mothers with complex breastfeeding issues who were not able to be supported locally by community Midwives or Health Visitors. All clinics are facilitated by a band 7 lead (Community) and 1 band 6 IFA (Acute).

Table 14: NHSGGC Breastfeeding Clinic Information

<table>
<thead>
<tr>
<th>BF Clinics</th>
<th>January-Dec 2016 Total referrals: 1142</th>
<th>January-Dec 2017 Total referrals:</th>
<th>January-Dec 2018 Total referrals:</th>
</tr>
</thead>
<tbody>
<tr>
<td>West Maternity HUB</td>
<td>New appointments 395 Returns 321</td>
<td>New appointments 366 Returns 243</td>
<td>New appointments 373 Returns 280</td>
</tr>
<tr>
<td>Monday 0930-1600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RAH Maternity Unit</td>
<td>New appointments 337 Returns 204</td>
<td>New appointments 319 Returns 150</td>
<td>New appointments 209 Returns 133</td>
</tr>
<tr>
<td>Thursday 0930-1300</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Princess Royal</td>
<td>New appointments 150 Returns 68</td>
<td>This clinic ended on 15/06/16</td>
<td>N/A</td>
</tr>
<tr>
<td>Wednesday 1300-1600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referral to new appt %</td>
<td>77%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Trak March 19

The data for Breastfeeding clinics is limited. The total number of new appointments to clinics has reduced from previous years with 1098 new appointments attended in 2014 across 4 clinics to approx 600 across 2 clinics in the last 2 years. Based on average delivery for 50 weeks this was approx 18.5 patients a week last year.

During the initial phase of the review an increasingly robust triage process was developed by the Infant Feeding Team. The triage process which included the investigation of referrals; providing advice to Midwifery and Community staff (for mothers not attending clinics) and following up mothers to attend clinics. Concerns were identified in relation to the level of inappropriate referrals to clinics from Midwifery and Community staff.

The Infant Feeding Survey 2017

Nationally two thirds of respondents reported challenges with breastfeeding (67% nationally, 65% GGC). In the early stages these related mainly to attachment and concerns over milk supply. Increasingly concerns over milk supply become more evident along with maternal issues in the subsequent weeks.

69% of those in the least deprived areas reported challenges compared with 57% in the most deprived areas.

- The most frequently reported reasons for stooping were feeding problems; concern over milk supply and ‘too difficult’.

- Approx two thirds of respondents to the survey at 3 months indicated that they had been given formula milk at some stage (67% respondents and 68% GGC).

Nationally 69% of respondents form the most deprived areas had given their baby formula milk at some time (60% in the least deprived areas)
**Across Scotland**

Information from other Health Boards (below) indicates the model of support varies in different areas. The availability of 1:1 specialist support is generally provided by a skill mix of IFA / Midwives and MCAs in the early weeks. The majority of mothers are supported at home by HVs or MCA / IFSW roles.

**Table 15: Scottish Breastfeeding Clinic Information**

<table>
<thead>
<tr>
<th>Health Board</th>
<th>Clinics?</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lothian</td>
<td>Yes</td>
<td>Current clinic arrangements identified 50% of women have babies &gt;28 days. Review underway to reduce from 2 clinics to 1 with majority of babies supported by Health Visitors.</td>
</tr>
<tr>
<td>Lanarkshire</td>
<td>Yes</td>
<td>Weekly combined with Frenotomy clinic</td>
</tr>
<tr>
<td>Tayside</td>
<td>Ad Hoc</td>
<td>Provision of ad hoc one to one appointments on request up to max 4 weeks of age (x2 0.5 wte IFAs).</td>
</tr>
<tr>
<td>Ayrshire &amp; Arran</td>
<td>Ad Hoc</td>
<td>Provision of ad hoc one to one appointments on request up to max 4 weeks of age</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>Yes</td>
<td>Breastfeeding Clinic twice a week supported by IFA/ Midwife with an MCA or Nursery Nurse. Midwives refer mothers from community or for follow up when they leave the ward. The MCAs also offer additional support in the home.</td>
</tr>
</tbody>
</table>

**Frenotomy**

A dedicated Frenotomy clinic was introduced in 2016. The clinic led by a specially trained IFA replaced previous arrangements provided by a paediatric surgeon. Within NHSGGC a sole practitioner is currently providing the service, a second practitioner has been trained but has not been signed off. The clinic provides both breastfeeding advice by an IFA as well as surgical intervention when required. Referrals are received from 0-16 weeks.

During the course of the review significant concerns by a number of stakeholders have been raised, regarding the sustainability of this service. The evidence base (NICE 2005) supporting the delivery of frenotomy is now dated and practitioners and managers have indicated further consideration of these clinics is required in the context of this review.

From the introduction of the clinic a significant increase in tongue-tie related referrals/procedures has been described in GGC this is described by stakeholders as being driven by public demand and awareness as well as professional referral.

From 2016 the number of appointments has remained consistent suggesting this is an organisational construct rather than a true reflection of referral numbers and demand. Anecdotally demand reflects a sizable increase over this period with extended waiting lists resulting.

**Table 16: Frenotomy Appointments**

<table>
<thead>
<tr>
<th>Frenotomy Clinic RHC</th>
<th>Jan 2016 - Jan 2017</th>
<th>Jan to Dec 2017</th>
<th>Jan to Dec 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday 1330-1630</td>
<td>Appointments 620</td>
<td>Appointments 543</td>
<td>Appointments 543</td>
</tr>
<tr>
<td>Patients</td>
<td>870 patients</td>
<td>559 patients</td>
<td>452 patients</td>
</tr>
<tr>
<td>Returns</td>
<td>-</td>
<td>-</td>
<td>26</td>
</tr>
<tr>
<td>N°. of Procedures -</td>
<td>-</td>
<td>234</td>
<td>-</td>
</tr>
<tr>
<td>Frenotomy</td>
<td></td>
<td>Source: Trak March19</td>
<td></td>
</tr>
</tbody>
</table>

No data is available regarding the appropriateness of referral or number of interventions carried out limiting the ability to define ‘real demand’ however based on 50 weeks of clinic
time approx 9 patients are seen weekly. Between 2017 and 2018 there was a reduction of over 100 patients. Different feedback has been received regarding the number of babies who receive intervention and those who receive infant feeding advice (previously estimated to be the majority however approximately 45% of babies attending actually received procedure based on data provided by Children’s services in 2017).

An assessment of the appropriateness and developmental stage of referral; level of intervention and the associated breastfeeding outcomes for these babies should be undertaken as soon as possible. The reported increase in referral to frenotomy suggests an opportunity to consider when best to make an assessment in relation to tongue tie and that there is a training gap in staff (midwifery and health visiting) knowledge, skills or confidence in relation to tongue tie. There is generally wider public awareness of tongue tie and expectation that many feeding challenges can be resolved by intervention.

A national mapping of frenotomy activity is currently being undertaken and a national review is planned. Highland as only available comparator data at this time undertake an average of 3 interventions per week and are seeing an ongoing increase in demand/ interventions. As with local frenotomy clinics a large proportion of patients attending the clinics will receive infant feeding advice for complex problems not just assessment and intervention for frenotomy.

- **Challenges and Opportunities**

Opportunities to improve the flow of patient information and the use of eHealth systems to develop formalised referral management arrangements have been acknowledged by both Management and IFAs. Recent developments regarding management of clinic pressure demonstrate the need for systematic referral procedures.

Referral management should be supported by improved confidence to manage common breastfeeding issues within scope of core Midwifery / Health Visiting practice. Lower referral rates to BF clinics described by HV teams furthest from clinic locations suggest local practice can be developed to reduce demand on specialist clinics. Opportunities to maximise community based support should be part of the referral pathway.

Improved access to local community support arrangements (BF support groups) and National help line should be promoted as part of referral protocols.

Routine analysis of source of referral would facilitate easier guidance on which teams require additional support/ training and help identify where additional mentoring for staff may be beneficial.

- **Way Forward**

The ongoing need to provide specialist support for complex feeding problems is acknowledged. The literature suggests this model of support is often accessed later than desirable and when problems are well established, and therefore the emphasis on providing proactive access to routine universal support for anticipated (commonly experienced) feeding problems is key to early intervention and may offset the social gradient on help seeking behaviours described within the literature (Trickey and Newburn 2012).

The provision of support to enable the core midwifery and health visiting workforce to address common problems at the earliest opportunity should be addressed within a future model of support.
Access to specialist infant feeding support through robust referral pathways and delivered as locally as possible would be ideal. The current breastfeeding 2 centre clinic model should be considered as part of child health service developments going forward. Whilst access to specialist IFA support will be required, opportunities to deliver support in local community settings using a skill mix team; Infant feeding advisor and midwife/ health visitor or MCAs as presented in other health boards is worth further consideration as community hubs are developed.

Current cross boundary working by IFAs, whereby IFAs have operated as a whole system team has enabled service continuity in challenging circumstances and is recognised.

Tailoring the level and type of support to the needs of the Mother/ family is essential and a menu of support can be seen both within the literature and examples of practice in GGC and other Health Boards.

A tiered support model would define universal and specialist elements with associated escalation and referral pathways to reflect 1) core service provision (HV based); 2) case management support (for varying levels of complexity); 3) specialist input for highly complex and ongoing community peer support. There are already examples of this approach in practice however a formal adoption of a tiered model would focus strategic development of the Infant Feeding approach across GGC and ensure best use of limited specialist expertise. A business management review should be undertaken to ensure full use of eHealth systems are employed to support referral management pathways to specialist support and reduce the administrative impact on Infant Feeding Advisors.

Community based clinics are unlikely to be an effective model for frenotomy arrangements. However improved support to core Midwifery and Health Visiting teams should be provided to encourage early identification of tongue tie and reduce the need for these clinics where possible.

The current arrangements within /NHSGGC for frenotomy are not sustainable. The national frenotomy review will inform local arrangements but in the short term improvements in referral management should be encouraged.

4.7.3 Maternal Support in Maternity Units

Infant feeding support for mothers aims to establish the chosen feeding method as early as possible. Building on the Skin to Skin contact established in the labour suite; all mothers are supported by the midwife to initiate breast feeding where possible and where desired. Many mothers (approx 54%) will initiate breastfeeding at this earliest stage but may not go on to undertake a full first feed.

The role of the midwife and student midwife in encouraging and supporting breastfeeding in the first few hours is a critical factor in establishing breastfeeding. The practical skills and knowledge associated with this stage are routinely assessed as part of the auditing of BFI standards. The emphasis on practical skills such as positioning provided through face to face training was a highly valued aspect of the current training arrangements.

The identification of mothers who intend to breastfeed from the antenatal stage can act as an indicator of support requirements throughout the postnatal pathway including continuity of care post discharge. Support requirements should be identified as early as possible but should not limit the support available to all mothers who initiate breastfeeding regardless of prior intention. The communication of support needs across the multi-disciplinary workforce and throughout the infant feeding journey was subject of much discussion with stakeholders and the concept of an ‘infant feeding plan’ should be further explored and defined.
The role of the IFA on the ward includes the support development of skills within the core workforce through support and mentoring, enabling midwives to provide enhanced care to mothers who present with common breastfeeding issues.

From the available data we may see encouraging improvements in level of exclusive breastfeeding by discharge but we can also see the potential of encouraging breastfeeding with PRM and OEUH increasing levels of breastfeeding in the context of mixed feeding from first feed to discharge.

Mothers who are breastfeeding are routinely identified and a ‘caseload’ generated which is picked up by the IFA. On a busy postnatal ward this can be challenging and capacity or at times capabilities result in routine support rather than specialist support being requested of the infant feeding advisor. Depending on capacity and shift patterns for IFAs across the 3 maternity units, inevitably variation in the availability and level of support provided has been described by Stakeholders.

Within NHSGGC breastfeeding initiation rates are relatively good (Section 4.1; Table 4) and the potential to establish breastfeeding with greater numbers of mothers who initiate is huge. This is a ‘twenty four/ seven’ challenge which can only be met through the efforts of the core workforce providing universal support.

The data below illustrates the Exclusive Breastfeeding Feeding at Birth and at Discharge for Jan 2015 to December 2015. If support requirements based on for Breastfeeding is calculated using the numbers breastfeeding in each unit then this is:

**Table 17: Number of Women per Maternity Unit per Week Requiring Infant Feeding Support at First Feed and Discharge**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Numbers exclusively BF At birth</th>
<th>Numbers requiring support per week At birth</th>
<th>Numbers exclusively BF At discharge</th>
<th>Estimated numbers requiring support per week At discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>VoL</td>
<td>19</td>
<td>Less than 1</td>
<td>15</td>
<td>Less than 1</td>
</tr>
<tr>
<td>IRH</td>
<td>9</td>
<td>Less than 1</td>
<td>7</td>
<td>Less than 1</td>
</tr>
<tr>
<td>RAH</td>
<td>1127</td>
<td>21</td>
<td>809</td>
<td>15</td>
</tr>
<tr>
<td>PRM Unit</td>
<td>1512</td>
<td>29</td>
<td>1110</td>
<td>22</td>
</tr>
<tr>
<td>QEUH</td>
<td>2860</td>
<td>55</td>
<td>2159</td>
<td>42</td>
</tr>
<tr>
<td>NHSGGC</td>
<td>5527</td>
<td>106</td>
<td>4100</td>
<td>79</td>
</tr>
</tbody>
</table>

Source: Scottish Birth Record 2017

Development of a multi-disciplinary focus within maternity teams is highlighted in the Best Start programme and again connections to infant feeding support and Infant Feeding Advisors should be considered as part of this development.

During the course of the review a skill mix model was introduced within postnatal wards with investment in Maternity Care Assistant (MCA) roles. Infant feeding including support for breastfeeding mothers is a core element of the MCA role. Role definition supports the escalation of breastfeeding problems to the supervising Midwife.

Opportunities to strengthen the evolving multi disciplinary maternity teams through investment in MCA roles requires careful management to ensure infant feeding activities are maximised within the roles. Recommendations from other Health Boards highlight the need for detailed specifications to support the roles; ensuring adequate training and protected time for key activities related to infant feeding support. Routine auditing at 6 months into service identified opportunity to improve mentoring and support for MCAs.
➢ **Discharge**

The current length of stay within NHSGGC maternity units is based on admission and not delivery so is difficult to quantify however 20% of mothers are currently discharged within 24hrs.

<table>
<thead>
<tr>
<th>GGC</th>
<th>Total Discharge</th>
<th>Total &lt;24hs</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 16-Dec 16</td>
<td>10947</td>
<td>2232</td>
<td>20</td>
</tr>
</tbody>
</table>

These mothers are more likely to have had uncomplicated births; had previous children and be viewed as less vulnerable than women who have longer stays. A number of these mothers will be breastfeeding. For the many mothers who are now able to go home within 24 hours the emphasis for establishing breast and bottle feeding increasingly sits with the Community Midwifery Service.

Within Community Midwifery the frequency and duration of visits often relates to the type of feeding, with additional support often required by breastfeeding mothers in days 5-10.

For the majority of mothers, who stay beyond 24hrs the potential to support breastfeeding beyond initiation is available within the maternity unit however a number of these mothers will have more complex needs e.g. addiction; traumatic birth; intensive care requirements etc. Such needs may determine the level of support requires to sustain breastfeeding and may have more impact on the specialist IFA resource.

➢ **Complexity**

Feedback from stakeholders has queried the impact of the level of complexity of GGC babies and families. In a public health exercise undertaken by Dr Grey 2015\(^1\), 20% of GGC mothers were identified as requiring additional support of which 7% were defined as having significantly complex needs. Based on this analysis NHSGGC Maternity services aim to provide a universal approach to 80% of mothers through routine care provision and maternity teams.

If a similar model is applied to specialist infant feeding input is likely to be required with supported practice (such as a breastfeeding assessment and care plan) for almost 14% of mothers and direct care from IFA’s for approx 7% of mothers.

Based on current levels of breastfeeding (all births) the average number of mothers requiring breastfeeding support on a weekly basis is approx 130. This would breakdown to approx 94 who would require universal support; 26 requiring assessment and care planning with 10 requiring direct care.

➢ **Neonatal Support**

The current model of ward support within Neonatal units is well regarded across professional groups. Breastfeeding support in Neonatal services is embedded and resourced within the service model of each unit with evidence of strong clinical leadership advocating the benefits of breast milk. The core neonatal team has identified additional capacity which is supported by the specialist IFA resource. Within neonates trained volunteers are considered part of the team.

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\(^1\) These proportions also relate to the rationale applied to the Health Plan Indicator allocated to every child which determine whether the family is core, additional or intensive and used to allocate workload to HVs.
The strong links between the neonatal units and the Donor Milk Bank and Breast Pump loan scheme support improvements in the availability of breast milk at this crucial stage.

The opportunity to develop longer term relationships with regular family awareness sessions on Infant Feeding and the provision of ongoing support (over the phone or face to face) to families following discharge.

**Breast Pump Service**

NHSGGC currently operate a Breast Pump Loan Scheme, whereby mothers who need additional support to provide breast milk normally due to pre-term delivery; weight loss or failure to attach and meet criteria are provided with pumps on a short term loan basis. BFI standards require mothers to be supported to use breast pumps (as appropriate) and breast pump use is a standard element of infant feeding training provided. Within NHSGGC the pumps are principally used when difficulties in establishing milk supply occur.

There are approx 200 pumps across the organisation with 90-110 on active loan/ week. The pumps, which are multiple use with high yield capacity and are superior to domestic pumps, are hired from supplier with a replacement cost of approx £1200. NHSGGC also provide the user kit to the mother and all mothers sign a contract to return the pumps.

Although the literature describes the use of breast pumps as increasing, there is little evidence for their effectiveness in extending the duration of breastfeeding.

Breast pumps were identified in Scottish studies as valued and desirable incentives to support the continuation of breastfeeding by mothers (McInnes to be published / Crossland 2016). Further evaluation of their use and impact should be considered in relation to ongoing use within the community.

**Challenges and Opportunities**

Pumps are currently issued via maternity units; however tracking the location/ availability of the pumps is an ongoing challenge. Delays in the return of pumps are an ongoing threat with some parents reluctant to release the equipment. Considerable administrative time is currently provided by infant feeding advisors in relation to the scheme with an estimate of approx 15 hours/ week required.

Not all Health Boards offer a pump loan scheme however the scheme is valued within GGC particularly in relation to Neonatal care. Opportunities to improve the current scheme include; centralised administration function; multiple drop off points; arrangements for transportation between sites; annual budget to fund pumps (non recoverable) as well as the exploration of a national loan scheme.

**Way Forward**

Improvements to the administration of the Breast Pump loan scheme require to be identified.

Oppportunities to explore the use of pumps within the community setting have been raised thereby extending the ability to provide pumps to mothers beyond the current scheme where continuing clinical needs are identified as well as mothers who may benefit from pump use due to wider social/ financial vulnerability.

**Peer Support on Postnatal Wards**

Ward based peer support is most developed in Neonatal Units in NHSGGC with 12 hours of paid peer support each week. In addition there is a small team of volunteers active in the Neonatal units. All peer supporters receive formal induction; training and mentoring and
support supervision from the Neonatal IFA. Clinical support is provided from the Neonatal IFA in the unit and all peer supporters (paid or voluntary) are well established in their roles.

Ward based peer support has been previously developed in postnatal wards however there are currently no active peer supporters in GGC.

- **Environment and Culture on Wards**

The maternity environment and culture should support the avoidance of any unplanned switches to formula feeding. The current BFI supplementation audit programme suggest options to manage formula within units should be further explored as the limited literature available suggests a positive impact of limiting availability (potential options such as non branded formula products or means tested dispensing machines were identified by staff), supplementation monitoring is already established.

- **Challenges and Opportunities**

Both universal and specialist support for breastfeeding mothers should be available in the post natal setting. Multiple stakeholders have expressed the desire to see a model which provides capacity to deliver robust universal support for the initiation of lactation, effective feeding practice and the management of early common breastfeeding challenges with appropriate ongoing support in a postnatal setting. However concerns regarding capacity of staff to provide this universal support have also been expressed and reflect the decision by MINF to invest in Maternity Care Assistants.

The ongoing mentoring of core midwifery staff was widely acknowledged as integral to the model however views varied in how well this was established and whether opportunities to formalise arrangements could be put in place at unit level. In particular the consideration of support for community midwifery teams was a gap identified. Opportunities to explore ehealth solutions (such as skype) to support community teams were suggested.

Similarly there is the desire to make best use of specialist IFA expertise for those mothers who need specialist support. Challenges exist in making the best use of IFA time with families on the postnatal wards and balancing this with other demands on IFA time.

4.7.4 **Way Forward Discussion**

Over half of mothers undertook a first feed within NHSGGC and retaining an increasing proportion of these mothers to be exclusively breastfeeding at discharge should be the principle outcome for maternity services.

There is a clear rationale to support enhancement of the universal support provided to all women who wish to breast feed. Routine breastfeeding support should be led by core midwifery staff recognising the benefits of a skill mix approach.

Roles such as MCAs; IFSW; Nursery or Nurses require adequate training and mentoring and a dedicated infant feeding support function should be defined within their role.

Learning from other Health Boards and the literature is such that these roles can support positive breastfeeding outcomes. However, the expectation of such posts in relation to infant feeding should be clear from the outset and adequate staff numbers/ time allocated in the context of other duties to deliver this function at sufficient level necessary to create impact.
An opportunity to further strengthen ‘ownership’ of the BFI standards was identified by maternity staff suggesting closer alignment of Infant Feeding Advisors to maternity units, potentially working more closely with a number of MCAs. An example of a test of change or improvement approach would be a useful means by which to test this approach in practice.

Specialist support provided by infant feeding advisors should complement the universal provision and providing a combination of mentoring and supported practice alongside more complex assessment; care planning and specialist intervention at ward level. The allocation of specialist support should be considered in the context of job planning IFA support across the 3 major maternity units. This requires to be balanced with other activities such as BFI audit training and breastfeeding clinic provision.

Given reductions in the average delivery to discharge periods there is an increasing emphasis on the breastfeeding support role provided by community midwifery within the first 10 days. Additional universal support would appear to be beneficial during this time and examples of Infant Feeding Support Worker roles are described in the literature and practice of other boards are promising. Explicit consideration of support for Community Midwifery Teams is required.

For mothers and babies whose hospital stay is longer, in particular those requiring neonatal support a more intensive support model is desirable due to the widely accepted health benefits of breast milk for the patient group. Building on the positive developments within GGC neonatal service the model of support should be extended to the new transitional bed arrangements identified within the Best Start programme.

The expansion of the NHSGGC Milk Bank should consider additional support requirements for this group of patients and the mentoring and development programme delivered by the Infant Feeding team should prioritise building capacity with teams in these service areas.

The role of the MCA offers further potential especially if capacity is linked to mothers who wish to breastfeed. Evaluation of the Maternity Care Assistant programme will be undertaken.

4.7.5 Maternal Support in Community

Care is generally transferred to the Health Visitor at 11-14 days when the New Baby Home Visit takes place. As the New Universal Health Visiting Pathway is fully implemented the opportunity to reaffirm infant feeding with best practice messages and check the physical developmental of the baby including weight gain will increase with a minimum of 12 total visits (see section 5).

The relational development between parents and the health visitor team over this time is of key importance when considering the opportunity to promote continued breastfeeding and/or to provide sound practice in relation to mixed or formula feeding when chosen by parents.

The Health Visitor will ideally be the first point of contact for mothers who identify feeding related concerns allowing early identification and resolution of common problems. Recognition of the role of family members and friends in continuing breastfeeding should be considered when determining the level of support required by breastfeeding mothers.

Community IFAs routinely provide clinical advice and support with complex infant feeding issues for colleagues and staff groups as required. This supports the health visitor to remain the principle support for the mother and baby for the vast majority of cases.
As described in Section 4.7.2 above mothers with breastfeeding problems are often referred to the BF clinics. Current referral pathways do not require IFA involvement in advance of referral which may impact on the appropriateness/quality of referrals received.

Section 6 describes the current community IFA workforce distribution across NHSGGC. This needs to be considered in relation to the role and job planning for this group.

4.7.6 Way Forward Discussion

Within NHSGGC the greatest opportunity for intervention is provided by the Midwife and Health Visitor as part of routine contact. It is reasonable to expect that the additional investment in Health Visitors and the additional contact points with mothers by Health Visitors will provide infant feeding support as a core element of the Universal Pathway in a way not previously possible.

Building the capacity and capability of these staff groups is essential in providing a universal approach to infant feeding and achievement of sustainable BFI standards. It is proposed that the current mentoring arrangements and development role of the Infant Feeding Advisor Team requires a greater focus to achieve the scale of best practice required to improve breastfeeding outcomes. Links to the Universal Health Visiting Pathway where additional practice development capacity has already been secured in the form of practice teachers should be considered.

Based on existing good practice, the development of train the trainers and sound mentoring approaches would further support the core workforce to effectively manage common feeding challenges. Clear and realistic messaging which supports continuation of breastfeeding and/or breast milk in the context of mixed feeding are needed.

Access to specialist infant feeding support through robust referral pathways and delivered as locally as possible would be ideal. Examples of supported practice and care planning between Infant Feeding Advisors and referring health professionals (midwives or health visitors) has been observed and could be strengthened by explicit inclusion in the referral pathway in the form of tiers approach to specialist support.

Wider community support for infant feeding beyond the initial postnatal period is important with the risk of formula being introduced and thereby limiting exclusive breastfeeding early. The potential opportunity to support continued breastfeeding as part of optimum mixed feeding need to be covered as a part of a comprehensive approach.

4.8 Wider Breastfeeding Support in the Community

Across NHSGGC a number of breastfeeding support programmes have been ‘tried and tested’ and can broadly be classed as:

- Infant feeding support worker led e.g. Renfrewshire/ East Renfrewshire
- Peer or volunteer led breastfeeding support e.g. Renfrewshire
- NHS led support e.g. Baby Café in East Dun/ East Ren/ South Glasgow (in conjunction with NCT model) and Health Visitor led support groups
- Voluntary sector led support e.g. NCT/ BF Network/ La Leche/ Association of Breastfeeding Mothers support groups.
- National support e.g. Breastfeeding Telephone Support Line

Cumulatively from this menu 22 community based support groups / cafés were available across NHSGGC (Dec 18). Delivered in conjunction with the third sector there is a relatively
good spread across locations, with many groups located in areas of deprivation rather than areas where breastfeeding rates are highest.

Unfortunately evaluation of any the above local models has been limited and is insufficient to draw conclusions from in isolation. Wider (grey) literature from other Health Boards supports the published evidence in that the most promising interventions relate to paid infant feeding support worker initiatives linked to the maternal care pathway (and offer structured support) rather than models of ongoing ‘on demand support’ in the community.

Table 18: Scottish Support Models (Unpublished)

<table>
<thead>
<tr>
<th>Health Board</th>
<th>Summary</th>
<th>Target Group</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tayside</td>
<td>Antenatal, hospital and home contacts</td>
<td>Deprivation</td>
<td>↑ 6-8 weeks.</td>
</tr>
<tr>
<td>GGC East Renfrewshire HSCP Test of Change (Dean 2017)</td>
<td>HV and HCSW contacts from 10 days</td>
<td>Deprivation</td>
<td>Not measurable</td>
</tr>
<tr>
<td>Lanarkshire Hospital and community BF support workers (Mavor 2011)</td>
<td>breastfeeding support workers post birth/ discharge</td>
<td>Universal</td>
<td>↑ initiation and duration to discharge ⇒ no improvement at 6-8 weeks.</td>
</tr>
<tr>
<td>Highland Increasing BF rates in Highland (Mackay &amp; Huc 2016)</td>
<td>breastfeeding support workers antenatal, post birth/ discharge</td>
<td>Deprivation</td>
<td>↑ BF at 6-8 wks in IFSW caseload compared with local cohort described / data not clear ⇒ Impact on BF discharge data less clear</td>
</tr>
<tr>
<td>GGC Peer support (2011)</td>
<td>Antenatal MW support, volunteer support hospital and home contacts</td>
<td>Universal</td>
<td>↑ Initiation and exclusive breastfeeding at discharge likely to be attributable to the project. Data quality was poor</td>
</tr>
</tbody>
</table>

Locally, Infant Feeding Support Worker roles previously funded in Renfrewshire were associated with increased BF rates for the duration of the posts; the test of change in East Renfrewshire was associated with increased duration of Breastfeeding however drop off from discharge to first visit was not included in the intervention. Initiatives in Highland demonstrate increased BF rates at 6-8 weeks in deprived communities with dedicated IFSWs caseloads; NHS Lanarkshire recorded increased duration of BF through community based IFSW roles.

Volunteer led support has been more successful in other Boards than in GGC although local learning should continue to inform models of community support going forward.

NHS Tayside commission a third sector organisation to provided NHS trained volunteers in deprived communities with successful outcomes (NHS Tayside 2006). NHS Highland has a volunteer bank of 80 volunteers managed through an NHS paid co-ordinator (Band 4) who provide community support groups (Mackay and Huc 2016).

Currently Scottish Government provide funding for the Baby Café Initiatives within GGC. A local evaluation was undertaken which presents mixed results across the 3 localities. Many challenges relate to local buy in and shared delivery arrangements for the informal drop in model which is NCT banded. Most significantly the numbers accessing the Baby Cafe service are small. Ongoing evaluation of the Baby Café model is advocated in the Quality Assurance Framework by the NCT however only local evaluation data is currently available.
Health Visitor led groups are available across NHSGGC. Voluntary sector support groups further compliment the NHS led groups and are routinely promoted by NHSGGC staff. Variations in the nature; organisation and impact of breastfeeding support groups suggest there would be benefit in establishing a common quality assurance focus across GGC.

There has been no published evaluation of the National Telephone service however local statistics based on user postcode are available on request via Scottish Government and evaluation has now been commissioned.

**Way Forward**

There is limited evidence for community support but what is available (Oakley 2014) suggests that whilst community based support groups can be effective in supporting continuation in later weeks, locally the numbers participating are often small and provision may not adequately support mixed feeding practice. The provision of NHS and/or Voluntary Sector led support groups) is well established and fairly well distributed across NHSGCC, with many groups present in deprived locations. Benefits of developing a quality assurance approach to those groups currently available have been described by stakeholders and should be adopted.

A number of promising Voluntary Sector support models are evident in other health boards and evaluation should be considered when available. However initiatives which provide peer support (including paid IFSW) linked to the maternity care journey offer most promise and should funding become available for community support then would be considered in preference to the expansion of support groups.

**4.8.1 Diverse Communities and Breastfeeding**

Ethnicity is also an important factor associated with breastfeeding. A recent report by GCPH 2012 outlines the complex pattern of breastfeeding observed amongst ethnic minorities.

Within NHSGGC the largest ethnic group are of South Asian descent and the GCPH report (Breastfeeding project 2012) indicated that data suggests a greater likelihood of initiation / continuation to >4 months of breastfeeding in Asian groups. The report also describes reduced breastfeeding behaviour with greater ‘acculturation’ linked to generational status (i.e. first or second generation migrant); language spoken at home; length of residency and country of birth, breastfeeding patterns of new migrant mothers may be influenced by their host community, through the process of acculturation.

**From the Infant Feeding Survey 2017²:**

- **Of BME respondents 92% (93% Asian) reported giving their babies breast milk at some stage compared with almost three quarters of Scottish mothers.**
- **Just over half 59% Asian respondents reported challenges with breastfeeding**
- **By the time infants were six weeks of age, those reporting breastfeeding had dropped by 26%, the drop off for BME respondents at 6 weeks was less 14% and for Asian mothers 20%.**
- **72% of Asian respondents had at 3 months given formula at some stage compared with two thirds (67%) of the Scottish population.**

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² Analysis of Ethnicity is only available at national level for the survey however, due to the relatively small sample for many ethnicities caution some should be exercised.
Ethnicity has also been found to influence the breastfeeding practices of white mothers, suggesting that the cultural traditions of ethnic minorities can also influence the breastfeeding practices of the dominant culture in local areas.

Little is known about the needs of the current generation of South Asian mothers regarding breastfeeding support, however a response developed in conjunction with mothers and existing cultural networks of the South Asian Communities would be appropriate.

4.8.2 Way Forward Discussion

The provision of NHS or Voluntary Sector led support models targeting key groups such as Asylum Seekers or BME communities should be based on further needs assessment activity with the respective communities.

4.9 Social Norm Development and Wider Culture

The promotion of breastfeeding through the aspiration to develop breastfeeding as social norm is a long term priority when increasing the number of mother who expect to breastfeed. The use of positive social messaging is a core activity supported by community IFAs and local MINF working groups.

Activities often described as ‘whole system’ which promote public acceptability of breastfeeding are largely carried out by Health Improvement colleagues working with IFAs and a wide range of multiagency partners. Focusing on capacity building with staff, partners and organisations around breastfeeding issues and their role in supporting breastfeeding families is particularly relevant in our most deprived communities where breastfeeding rates are traditionally low and breastfeeding is not seen as the norm. Many children grow up in families where no one breastfeeds and they have no exposure to this as they grow up the focus on supporting breastfeeding through targeted family and neighbourhood action help reduce these barriers.

Whilst some of the activities described below are progressing in other HSCPs, the planned approach to Breastfeeding Cultural Change programmes in Glasgow City, adopted across the 3 localities is of a size and scale which appears to be making an impact. Increases in BF rates in deprived communities are described in Section 4.1(Table 6).

The majority of this work has been undertaken in Glasgow City largely due to dedicated Health Improvement capacity and includes:

Breastfeeding Friendly Nurseries: Training is delivered to childcare staff in local nurseries with the aim of normalising breastfeeding and promoting well informed positive attitudes. Nurseries are encouraged to make their environment breastfeeding friendly, to remove resources which may promote formula/bottle feeding as the norm and consider how they would support their own staff returning to work breastfeeding. If the nursery meets the criteria and achieves the full award they are provided with resources. Within Glasgow city around 88% of pre-five establishments have received training and 84% have achieved the full award.

Breastfeeding Welcome Award: The award identifies locations which support women to breastfeed their baby while out and about. Underpinned by the Breastfeeding Scotland Act and the Equality Act, the award creates public endorsement of breastfeeding and a range of organisations; public, third sector and businesses have been approached to participate in the scheme. Within Glasgow, all Glasgow Life venues; libraries, leisure centres, community facilities, museums and facilities hold the award. Within Health, all Health Centres and some GP practices hold the award. During the Commonwealth Games many of our large football
stadiums were also provided with training. Key partner organisations who work with families have received the award as well as some housing associations, and local businesses. A sustainable update training model has been introduced for organisations that have previously had training and wish to maintain the award.

**Training for College students:** Training is also provided to NC, HNC and HND Childcare course students (as well as some 6th year pupils on college placement) around the Breastfeeding Friendly Nursery and Breastfeeding Welcome programmes. Graduating students enter the workforce ready trained and we have anecdotal information that this has supported gaining employment. In 2017, 105 students received training.

Wider actions include social media promotion; employer breastfeeding accreditation schemes as well as school curricular to promote breastfeeding from preconception.

Close working with local children and families teams to promote; co-ordinate and deliver community breastfeeding support groups and weaning fayres in areas of greatest need is believed to have contributed to breastfeeding support being more widely available in areas with traditionally lower breastfeeding rates.

Developing connections with wider community support such as cooking classes and parent/toddler groups at antenatal and postnatal stages as well as providing input on infant feeding to a range of community projects aimed at mums to be; mothers and babies has provided additional social benefits for families.

Feedback from staff suggests the wider capacity building and inequalities function of the dedicated Health Improvement roles with Glasgow City requires further consideration and learning should be developed across NHSGGC.

4.9.1 **Way Forward Discussion**

National opportunities to adopt consistent approaches to cultural programmes have been identified and should be adopted across NHSGGC. Learning from the ‘whole system approach’ being progressed in Glasgow City should be extended to other areas when funding permits.
5. Early Years Nutrition

5.1 Complimentary Feeding

Breast or infant formula milk provides all the nutrients most infants need for the first six months. During the first year of life there is a period of rapid growth, particularly with regard to brain development, therefore it is essential that the infant's diet expands to provide an adequate supply of nutrients and energy. Weaning is described as the gradual introduction of solid foods to an infant's diet alongside usual milk feeds (breast or formula) (MINF 2011).

During the course of this Review the Scientific Advisory Committee on Nutrition published an authoritative review on best practice regarding weaning. Key messages include:

- Introduction of complimentary feeding should take place at around 6 months for most, having achieved developmental readiness.
- Foods should be introduced alongside breast or formula milk.
- A variety of foods should be offered to provide diverse flavour, texture and nutrients.
- Repeated exposure to new foods enhances their acceptance.
- Skills such as chewing are developed by experience so progressing to firmer textures is beneficial.
- Responsive feeding practices (based on signals of hunger and fullness provided by the child) may be beneficial in relation to quality of diet and excessive weight gain by 1 year.
- Baby led weaning practice is associated with food enjoyment and less fussiness but there is limited evidence of impact on overweight.

5.1.1 Weaning Practice

Current infant feeding data indicates higher levels of delayed weaning have been seen in recent years. However, delayed weaning to 6 months is more likely among women who seek information and advice from professional-led sources which is likely to create a social gradient effect (Moore et al 2012).

The Scottish Maternal and Infant Nutrition Survey 2017:

- The vast majority 96% of respondents nationally reported waiting until their infant was 4 months old before weaning compared with 99% in GGC and 46% reported waiting until 6 months compared to 52% in GGC.

- 95% of respondents from the most deprived areas waited until their infant was 4 months before weaning (98% in the least deprived areas). 44% and 50% waited until 6 months in the most and least deprived areas respectively.

Health Visitors and the wider Child and Family teams will continue to provide universal support for infant weaning as part of frontline Health Visiting which is underpinned by professional guidance for each development stage and visit. Weaning stage is now recognised as a good opportunity to promote whole family nutritional advice that can influence longer term family feeding practices (i.e. weaning practice per se need not be seen as the ultimate goal).
5.2 Key Messages from the Literature: Weaning Support

In addition to enhancing nutritional intake, the weaning process, the type of foods and drinks given to infants is important for establishing longer term eating habits. Early exposure to a variety of tastes and textures is important developing children's food preferences. Eating patterns and food preferences established in early childhood are likely to be carried on into later life.

Establishing sound weaning practices at the appropriate stage is the foundation of early years nutrition required for all children. Regular support promoting age appropriate weaning and improved nutritional content of infant diet is beneficial, increasing maternal knowledge and confidence.
The development of a healthy balanced diet in families is an important factor in reducing the risk of childhood obesity. Inappropriate complementary feeding and low levels of physical activity are associated with risk of overweight/obesity in childhood and later years. Promotion of physical activity and reduction of sedentary behaviour should be routinely advised. All health professionals should be aware of risk factors for obesity and know how to signpost to age-appropriate services. Visits of 3, 4 months provide opportunity for key messaging and support.

5.3 Way Forward Discussion

The extension of routine contact with the health visiting team will allow more opportunities for individualised advice and information about weaning and family nutrition as part of the New Universal Pathway (NUP) implementation.

The continuation of Weaning Fayres is difficult to justify when local evidence of impact is limited; provision is adhoc and general literature supports the reinforcement of infant feeding practices through routine engagement with the family.

The structured approach provided by NUP allows all aspects of infant feeding practice to be addressed at key development stages. The alignment of wider HPs/ diet/ oral health/ IFAs to support this approach should be prioritised.

5.4 Infant Growth

Babies and children grow at different rates and it is normal for them grow more slowly or quickly at times therefore growth in children is measured against a series of growth charts which provide an indication of average weight gain by age across the population. http://www.rcpch.ac.uk/growthcharts. If a child is not gaining weight in line with the charts this maybe an indication of ‘faltering growth’ or if a child starts to exceed growth expectations this may indicate overweight concerns.

When children are identified to be out with expected growth projections assessment and intervention in line with NICE 75 (2017) or NICE (2013) SIGN 115 (2010) should be provided.

5.4.1 Infant Weight Data

Taking an average over 3 years the BMI distribution among children aged 27-30 months indicates that less than 1 % of children are underweight. Contrastingly 28% or almost 1 in three children were identified as overweight or obese. Overweight is therefore of increasingly significant concern with sizable numbers affected; 16.3% (n=1055) overweight, 7.3% obese (n=472) and 4.5% severely obese (n=290) as described in table 19.
Table 19: BMI Distribution Among Children Aged 27-30 Months

<table>
<thead>
<tr>
<th>HSCP</th>
<th>Not Known % (n)</th>
<th>Underweight % (n)</th>
<th>Healthy Weight % (n)</th>
<th>Overweight % (n)</th>
<th>Obese % (n)</th>
<th>Severely Obese % (n)</th>
<th>Known totals (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glas North East Sector</td>
<td>44.7 (909)</td>
<td>0.5 (5)</td>
<td>67.6 (675)</td>
<td>17.3 (173)</td>
<td>8.3 (83)</td>
<td>6.3 (63)</td>
<td>3599</td>
</tr>
<tr>
<td>Glas North West Sector</td>
<td>40.2 (652)</td>
<td>0.9 (9)</td>
<td>73.7 (714)</td>
<td>14.2 (136)</td>
<td>6.8 (68)</td>
<td>4.3 (41)</td>
<td>699</td>
</tr>
<tr>
<td>Glas South Sector</td>
<td>47.7 (1091)</td>
<td>0.3 (4)</td>
<td>74.3 (888)</td>
<td>13.9 (166)</td>
<td>6.8 (81)</td>
<td>4.7 (57)</td>
<td>1196</td>
</tr>
<tr>
<td>Glasgow City Total</td>
<td>44.7 (2553)</td>
<td>0.6 (18)</td>
<td>72.0 (2277)</td>
<td>15.1 (477)</td>
<td>7.3 (230)</td>
<td>5.1 (161)</td>
<td>3163</td>
</tr>
</tbody>
</table>

East Dun HSCP | 28.6 (300) | 0.3 (2) | 70.1 (528) | 19 (143) | 7.1 (53) | 3.6 (27) | 705 |
| East Ren HSCP | 33.7 (358) | 0.6 (4) | 75.6 (533) | 15.6 (110) | 5.7 (40) | 2.6 (18) | 750 |
| Inverclyde HSCP | 28.1 (198) | 0.3 (1) | 71.2 (381) | 16.6 (64) | 7.8 (39) | 4.1 (21) | 507 |
| Ren HSCP | 39.5 (681) | 0.2 (2) | 69.7 (708) | 18 (183) | 7.9 (80) | 4.1 (42) | 1013 |
| West Dun HSCP | 61.1 (546) | 0.5 (2) | 68 (237) | 16.9 (59) | 8.2 (28) | 6.3 (22) | 348 |
| Total | 41.6 (4517) | 0.5 (30) | 71.5 (4639) | 16.3 (1058) | 7.3 (472) | 4.5 (290) | 6487 |

Source: CHSS-PS (1st October 2013 - 30th September 2016: Annual Average)

All most 1/3rd (30.4%) of children from the most deprived communities are overweight; obese or severely obese compared to a quarter (24.7%) of children from the least deprived communities. The prevalence in the most severely obese category is more than doubled in the most deprived communities as described in table 20 below.

Table 20: BMI Distribution Among Children Aged 27-30 Months by SIMD

<table>
<thead>
<tr>
<th>SIMD 2012 Quintile</th>
<th>0:Not Known % (n)</th>
<th>Underweight % (n)</th>
<th>Healthy Weight % (n)</th>
<th>Overweight % (n)</th>
<th>Obese % (n)</th>
<th>Severely Obese % (n)</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Most Depressed)</td>
<td>47.8 (2163)</td>
<td>0.4 (10)</td>
<td>69.1 (1630)</td>
<td>16.7 (393)</td>
<td>7.8 (165)</td>
<td>5.9 (140)</td>
<td>4522</td>
</tr>
<tr>
<td>2</td>
<td>43.6 (822)</td>
<td>0.5 (5)</td>
<td>71 (758)</td>
<td>18.3 (174)</td>
<td>7.5 (80)</td>
<td>4.6 (49)</td>
<td>1889</td>
</tr>
<tr>
<td>3</td>
<td>39.5 (556)</td>
<td>0.6 (5)</td>
<td>73.3 (625)</td>
<td>15.5 (132)</td>
<td>7.1 (61)</td>
<td>3.6 (30)</td>
<td>1411</td>
</tr>
<tr>
<td>4</td>
<td>39.6 (454)</td>
<td>0.4 (3)</td>
<td>71.4 (561)</td>
<td>16.5 (130)</td>
<td>7.6 (60)</td>
<td>4.1 (32)</td>
<td>1240</td>
</tr>
<tr>
<td>5 (Least Depressed)</td>
<td>30.3 (619)</td>
<td>0.5 (7)</td>
<td>74.9 (1085)</td>
<td>15.9 (226)</td>
<td>6.1 (87)</td>
<td>2.7 (38)</td>
<td>2041</td>
</tr>
<tr>
<td>Total</td>
<td>41.6 (4717)</td>
<td>0.5 (30)</td>
<td>71.5 (4639)</td>
<td>16.3 (1058)</td>
<td>7.3 (472)</td>
<td>4.5 (290)</td>
<td>11103</td>
</tr>
</tbody>
</table>


Data collected in primary schools indicates that within NHSGGC, 15% of Primary 1 children were classified overweight or obese in 2016/17. Most worryingly the numbers of children who are severely obese are showing signs of increasing at this early age.

Over the last 6 years the number of children who are underweight in P1 has been fairly stable at 0.5% of the measured population and at similar levels to those identified as underweight at 30 months.
Table 21: NHS Greater Glasgow & Clyde Number of P1 Pupils with Valid Height and Weight Recorded and the Prevalence of Weight by BMI Category and Year

<table>
<thead>
<tr>
<th>NHS Greater Glasgow &amp; Clyde (National percentage)</th>
<th>07/08</th>
<th>08/09</th>
<th>09/10</th>
<th>10/11</th>
<th>11/12</th>
<th>12/13</th>
<th>13/14</th>
<th>14/15</th>
<th>15/16</th>
<th>16/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>N of children with valid height and weight recorded</td>
<td>1,592</td>
<td>1,637</td>
<td>7,487</td>
<td>1,834</td>
<td>10,950</td>
<td>11,495</td>
<td>11,492</td>
<td>11,621</td>
<td>10,882</td>
<td>9,702</td>
</tr>
<tr>
<td>% Underweight</td>
<td>11 (0.6)</td>
<td>9 (0.6)</td>
<td>0.5 (0.5)</td>
<td>0.9 (0.6)</td>
<td>0.3 (0.4)</td>
<td>0.3 (0.3)</td>
<td>0.3 (0.4)</td>
<td>0.5 (0.4)</td>
<td>0.3 (0.4)</td>
<td>0.3 (0.3)</td>
</tr>
<tr>
<td>% Healthy weight</td>
<td>86 (54.9)</td>
<td>88.1 (56.2)</td>
<td>65.6 (64.7)</td>
<td>67.7 (64.7)</td>
<td>84.6 (64.6)</td>
<td>85.4 (55.1)</td>
<td>85.5 (54.7)</td>
<td>85.9 (54.7)</td>
<td>85.6 (54.7)</td>
<td>84.5 (53.8)</td>
</tr>
<tr>
<td>% Overweight</td>
<td>6.8 (4.7)</td>
<td>7.3 (4.7)</td>
<td>8.2 (8.8)</td>
<td>6.6 (8.8)</td>
<td>8.9 (8.8)</td>
<td>8.5 (8.8)</td>
<td>8.3 (9.9)</td>
<td>8.1 (9.7)</td>
<td>7.6 (9.6)</td>
<td>8.2 (9.3)</td>
</tr>
<tr>
<td>% Obese</td>
<td>2.4 (3.4)</td>
<td>2.3 (3.4)</td>
<td>3.4 (3.6)</td>
<td>2.9 (3.4)</td>
<td>3.6 (3.6)</td>
<td>3.2 (3.4)</td>
<td>3.5 (3.8)</td>
<td>3.2 (3.7)</td>
<td>3.6 (3.7)</td>
<td>3.7 (3.9)</td>
</tr>
<tr>
<td>% Severely obese</td>
<td>1.6 (2.3)</td>
<td>1.4 (2.3)</td>
<td>2.3 (2.3)</td>
<td>1.9 (2.3)</td>
<td>2.6 (2.3)</td>
<td>2.5 (2.3)</td>
<td>2.3 (2.3)</td>
<td>2.3 (2.3)</td>
<td>2.6 (2.3)</td>
<td>3.2 (2.7)</td>
</tr>
<tr>
<td>% Overweight, Obese and severely obese combined</td>
<td>10.9 (14.4)</td>
<td>1.1 (14.2)</td>
<td>13.9 (14.7)</td>
<td>11.6 (14.7)</td>
<td>15.2 (14.9)</td>
<td>14.3 (14.6)</td>
<td>14.1 (15.6)</td>
<td>13.7 (14.9)</td>
<td>14.1 (14.9)</td>
<td>15.1 (16.9)</td>
</tr>
<tr>
<td>% Obese and severely obese combined</td>
<td>4 (5.7)</td>
<td>3.7 (5.0)</td>
<td>5.7 (5.0)</td>
<td>4.9 (5.0)</td>
<td>6.3 (6.1)</td>
<td>5.7 (5.7)</td>
<td>5.8 (6.4)</td>
<td>5.5 (6.2)</td>
<td>6.4 (6.3)</td>
<td>6.9 (6.7)</td>
</tr>
</tbody>
</table>

Source: ISD Body Mass Index of Primary 1 Children in Scotland (December 2017)

There is growing evidence that overweight and obesity is tracking from early years to school age and into adolescence reinforcing the benefits of early intervention.

The Growing Up in Scotland study (2010) tracked overweight and obesity at age 10 in a sample of 2,800 children in Scotland between 2010/11 to 2015/16. The report found that there is a notable increase in rates of overweight/obesity in children between ages 6 and 10. Overweight/obesity at age 6 was strongly associated with overweight/obesity at age 10 and recommended that tackling / preventing overweight in early childhood may help reduce levels of overweight and obesity at later ages. The study found that many children of healthy weight at age 6 moved into overweight / obesity categories suggesting that prevention in early childhood alone is not sufficient in reducing levels of overweight / obesity in older children.

A German study (Mandy Geserick et.al. 2018) performed prospective and retrospective analyses of the course of BMI over time in a population-based sample of 51,505 children. They found that approximately half (53%) of the obese adolescents had been overweight or obese from 5 years of age onward. The study found that almost 90% of the children who were obese at 3 years of age were overweight or obese in adolescence. Among the adolescents who were obese, the greatest acceleration in annual BMI increments had occurred between 2 and 6 years of age, with a further rise in BMI percentile thereafter. The rate of overweight or obesity in adolescence was higher among children who had been large for gestational age at birth (43.7%) than among those who had been at an appropriate weight for gestational age (28.4%) or small for gestational age (27.2%), which corresponded to a risk of adolescent obesity that was 1.55 times as high among those who had been large for gestational age as among the other groups.
5.5 Growth and Nutrition Support

Evidence relating to the effective delivery of routine advice and information on weaning and feeding practice is limited with the research focus predominantly on interventions associated with established problems.

Specialist early years feeding support in NHSGGC is provided by the Growth and Nutrition Team. The role of the Growth and Nutrition team is to provide an advisory and practice development function to Child and Family teams and wider primary care staff in relation to formula fed infants from birth and breastfed children from the age of 6 months who have Growth Faltering related concerns.

In recent years this remit has been extended to include children with overweight concerns. The main elements of the service are:

1) A tiered (health visitor led) service providing specialist support to ‘referrers’ through
   a) Mentoring support principally to Health Visitors
   b) Supported case management with Child and family teams based on use of core assessment tools
   c) Consideration of cases through MDT review (Dietetic/ GPwSI/ Health Visitors) with input from community paediatrician as required
   d) Supported case intervention (for complex cases) where health visitors are mentored by Growth and Nutrition advisors or paediatric Dietitian as part of a joint home visit.

2) Provision of Growth and Nutrition Training to health professionals to support early identification and management of infants and young children with growth faltering or obesity. Annually 14 training sessions were provided the Growth and Nutrition team (equating to 34 staff delivery days) and included:
   • Weighing and Measuring – 4 sessions
   • Preschool growth and nutrition – 8 sessions
   • GCU sessions for SpPHN students – 2 sessions

   The current health professional training programme is largely weighted to practical use of tools (weighing/ growth charts), intervention techniques and case study discussions rather than education format and as such attendance is relatively small groups largely identified on an interested or adhoc basis. As part of the review a mapping exercise across all areas of Maternal and Infant Nutrition training has identified a number of gaps; overlaps and opportunities to develop a more integrated and systematic approach to education for Infant Feeding. Training is discussed later in the report section 6.1.

3) A development initiative to increase support for children with preschool obesity was undertaken in 2016. The ‘home Intervention’ initiative ‘tested’ the role of the nursery nurse in providing nutritional and physical activity intervention within the family setting and informs future training and development needs of C+F team staff to manage obesity within routine care.

At the time of the initial phase of the review, the service receives approx 200 referrals annually with most referrals from Health Visitors. Community Dietetics also route patients into the Growth and Nutrition service. A recent analysis of referral activity in graph 10 below indicates that whilst all HSCPs can refer to the service, the most significant areas of referral are from Govan and Govanhill in Glasgow City which is thought to reflect the alignment of a Growth and Nutrition Advisor in the South of the city as well as the impact of high numbers of vulnerable families living in deprived communities in this area.
Referral patterns in Clyde are lower relating to continued use of local paediatric services and community Dietetics.

**Graph 10: HSCP Referral Source**

![Graph showing referral source percentages.]

**Source: Growth and Nutrition 2017**

The recently published NICE Guideline for Faltering Growth is well reflected in the operation of the Growth and Nutrition Service arrangements. Reasons for referral are:

- Weight faltering 49%
- Obesity 36%
- Cow’s Milk Allergy 5%
- Other 10% (e.g. common nutritional problems such as allergies; food adversion; meal management)

Routine evaluation undertaken with referrers via survey monkey suggests high levels of appropriate referrals; with management of most cases provided by the Health Visitor on the basis of the ‘advisor’ support (75%); 27% of all referrals received MDT consideration; 18% required specialist Dietetic advice and only 10% required a mentoring support visit.

The service model supports application of the Faltering Growth guideline ensuring subsequent referrals to Community Paeds and Community Dietetic services are appropriate. Onward referral to community paediatricians for assessment remains via the patient’s GP and the family health visitor retains the lead for case management throughout.

An eHealth Growth and Nutrition referral form is about to go live on EMIS and will be stored contemporaneously with HV record, allowing more detailed activity reporting in the future.

### 5.6 Way Forward Discussion

The Growth and Nutrition Advisors identified that whilst clinically appropriate referrals were largely received, the nature of referrals was often underpinned by general parenting support needs manifesting in nutrition related problems. Maintaining links to generic parenting support through the Health Visitor were therefore felt to be of significant importance.

The current remit for the Growth and Nutrition team was defined by staff as ‘all bottle feeders from birth’ inevitably creating overlap with the remit of Infant Feeding Team who support ‘all
breast feeders and mixed feeders’, with both teams targeting mothers and babies at the same stage as well as the same groups of staff who provide care. Further integration of the work of specialist teams and approaches would be beneficial providing greater clarity relating to ‘who covers’ early years practice.

An organisational gap in policy leadership for infant feeding was highlighted by stakeholders with recognition that weaning advice requires to reflect emerging evidence and robust guidelines. Leadership for all aspects of Infant feeding strategy within NHSGGC should be strengthened and responsibility for infant feeding strategy clarified.

The opportunity to capitalise on collective expertise in the form of standardised messaging and integrated training through the development of an infant feeding pathway approach would facilitate better joint working across professional groups.

Stakeholders expressed a sense of service management but not of service development in current arrangements and as the review has developed there is recognised need to review the sustainability of a small specialist team and the ‘mainstreaming’ of the approach longer term.

The Growth and Nutrition model reflects a ‘specialist expertise’ role and sits somewhat ‘outside’ other practice development arrangements within Children’s Services. Opportunities for greater connection with new developments such as practice teachers will better support the expanding Health Visitor capacity.

The current provision of a tiered approach to case management support seems well founded and the mentoring approach used by the Growth and Nutrition team evaluates well with staff. The model strongly supports capacity building within the core child and family team and as such builds on the literature theme relating to relationship based support having a positive impact on infant feeding experiences and outcomes. The emphasis on maintaining the Health Visitor as the principal health professional potentially strengthens this impact further.

The Universal Health Visiting Pathway will provide all women with additional contact with their health visiting team and for the delivery of regular, individualised advice and information about complimentary feeding as major elements of the 3 month and 4 month visits. Stakeholders indentified the need to scope the role of the C+F team in child healthy weight more robustly.

Unsurprisingly evidence for the ‘effective prevention’ of childhood obesity evidence is limited. Evidence supporting the beneficial impact of establishing good eating practices on child growth and development however are relevant to achieving optimal weight gain. In the absence of better evidence early and regular interventions to improve maternal knowledge and confidence in family nutrition should be supported and therefore interventions to promote healthy weaning and establishment of healthy family meals remains our ‘best bet’.

Multi-disciplinary input into case reviews and the provision of joint home visits for the small number of faltering growth cases who require it is limited to the current level of referrals. Current capacity is insufficient to respond to the likely demand for support to address overweight and obesity through the existing 4 tiers of the service. The application of the mentoring element of the approach (Tier1) may be the most cost effective element of the service building on learning from the test for change project, allowing health visitors to provide home based support for CHW as core practice.
6.1 Core Workforce

6.1.1 Antenatal / Discharge – 10 days - Community Midwifery Service

Awaiting data

6.1.2 Postnatal Wards - Midwives /Maternity Care Assistants

From 2017 the core midwifery team in the postnatal wards has been strengthened by the introduction of additional MCAs. The resulting skill mix approach aims to release time for clinical staff whilst providing additional support for mothers and babies. The MCA role provides support for infant feeding and in particular breastfeeding mothers as a core element of their duties.

The overall compliment of staff resources from the period June 2018 – Jan 2019 was as follows:

Table 22: Maternity Workforce

<table>
<thead>
<tr>
<th>Trained WTE budgeted establishment</th>
<th>Trained WTE 17/18</th>
<th>Trained WTE 18/19</th>
<th>MCA Allocation from Nov 18</th>
<th>Existing MCA / Nursery Nurse prior to Nov 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRMU wards 72 +68</td>
<td>27.81</td>
<td>26.61</td>
<td>9.8</td>
<td>-</td>
</tr>
<tr>
<td>RAH ward 31</td>
<td>25.99</td>
<td>25.99</td>
<td>4</td>
<td>2.42</td>
</tr>
<tr>
<td>QEUH</td>
<td>31.48</td>
<td>31.48</td>
<td>4.8</td>
<td>4.72</td>
</tr>
</tbody>
</table>

The Maternity Care Assistant programme requires trainee’s to complete a formal validated training programme (combination of theory and placement elements) with UWoS for the initial 12 months. Following this the posts are mentored and supervised within midwifery teams.

Following successful completion of the programme 18.6wte came into service in June 2018. Initially posts were allocated across the maternity pathway but latterly, from November 2018 all posts were aligned within postnatal wards.

Further funding secured from the Breastfeeding Programme for Government during 2018/19 has contributed to an additional cohort of 20 MCAs being appointed and trained (coming into service June 2019).

The development of the MCA role within Greater Glasgow and Clyde represents substantial investment and as such the evaluation of this programme is of national interest.
**Child and Families Teams / Health Visiting**

### Table 23: Health Visiting Workforce

<table>
<thead>
<tr>
<th>Local Area</th>
<th>HV WTE 18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glas North East</td>
<td>89.9</td>
</tr>
<tr>
<td>Glas North West</td>
<td>80.3</td>
</tr>
<tr>
<td>Glas South</td>
<td>103.9</td>
</tr>
<tr>
<td>Ren</td>
<td>57.8</td>
</tr>
<tr>
<td>East Ren</td>
<td>20.9</td>
</tr>
<tr>
<td>West Dun</td>
<td>35.3</td>
</tr>
<tr>
<td>East Dun</td>
<td>24</td>
</tr>
<tr>
<td>Inverclyde</td>
<td>26.2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>438.2</strong></td>
</tr>
</tbody>
</table>

#### 6.2 Specialist Workforce

**6.2.1 Infant Feeding Advisors Maternity**

Infant Feeding Advisors (IFAs) are currently managed by the Lead Nurse for Neonatology.

At the time of the review (Nov 2017) the dedicated Infant Feeding Advisor capacity was:
- Infant Feeding Advisors Band 7 – 0.6wte plus 0.8wte Donor Milk Bank Band 7
- Infant Feeding Advisor Band 6 - 4wte (inc neonates)

**6.2.2 Infant Feeding Advisors Community**

**Clyde** Infant Feeding Advisors are currently managed by Health Improvement Renfrewshire HSCP with dedicated capacity of:
- Infant Feeding advisors Band 7 – 0.8wte

**Glasgow** Infant Feeding Advisors are currently managed by Children’s Services Manager North West Glasgow HSCP with dedicated capacity of:
- Infant Feeding advisors Band 7 – 1wte
- Infant feeding advisor Band 6 - 1wte

From 2015 a reduction of 6.3wte of infant feeding advisor capacity had taken place (1.8 Neonatal IFA; 3.3 Maternity IFA; 1.2 Community IFA). Investment has changed both in relation to allocation of national funding (MINF) and local recurring funding to the specialist resource.

During the course of the Review 2017 the situation has evolved:
- an admin post started in Nov 2017
- all fixed term or temporary posts were transferred to permanent arrangements
- an additional 1026hrs /approx 0.5wte was provided through bank arrangements within Maternity Services (2018/19)
- additional IFA capacity was secured within Clyde Community through local arrangements and confirmed as additional 0.2 Band 7 permanent in Jan 2019
- additional 0.4 wte capacity was identified within Inverclyde HSCP
- Maternity Infant Feeding Team Lead Band 7 stepped back from secondment arrangements with ongoing workforce discussions underway.
- Programme for Government funding has provided an additional 0.8wte Band 6 to support a whole system approach with Clyde sector.

By March 2019 the core IFA capacity is confirmed at 10.6wte Bands 5-7.
### Table 24: Infant Feeding Team

<table>
<thead>
<tr>
<th>Maternity Units (inc Labour ward/ postnatal ward/ community midwifery)</th>
<th>Location</th>
<th>Management</th>
<th>Capacity Nov 17</th>
<th>Capacity March 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAH/ PRM/ QEUH</td>
<td>Lead nurse Neonatology Maternity IF Team lead</td>
<td>Infant feeding Team Lead 0.6 wte Band 7 • IFA 3.3 wte Band 6 • Admin 1 wte Band 3 (vac)</td>
<td>IFA 3.9 wte Band 6 • Admin 0.7 wte Band 3</td>
<td></td>
</tr>
<tr>
<td>Neonatal Units (inc NICU)</td>
<td>RAH/ PRM/ QEUH</td>
<td>Lead nurse Neonatology</td>
<td>IFA 0.7 wte neonatal Band 6 • Neonatal 1 wte Band 6 (QEUH 3 shifts/ PRM 1 shift/ RAH 0.5 shift)</td>
<td>IFA 0.7 wte neonatal Band 6</td>
</tr>
<tr>
<td>Donor Milk Bank</td>
<td>Board-wide</td>
<td>Lead nurse Neonatology</td>
<td>0.6 wte Band 7</td>
<td>0.8 wte Band 7 • 0.8 wte Band 5 • 1.8 wte Band 3</td>
</tr>
<tr>
<td>Community Child and Family Teams</td>
<td>Glasgow City (3 sectors)/ East Dun</td>
<td>Locality Children’s Service Manager Glasgow city</td>
<td>1.0 wte Band 7 Community • 1 wte Band 6 (0.6 wte north west sector, 0.4 wte East Dun)</td>
<td>1 wte Band 7 Community • 1 wte Band 6 (0.6 wte north west sector, 0.4 wte East Dun)</td>
</tr>
<tr>
<td>Community Child and Family Teams</td>
<td>Clyde East Rep/ West Dun/ Renfrewshire</td>
<td>Health Improvement Manager Renfrewshire</td>
<td>0.6 wte Band 7 Community • Clyde 1.2 wte Band 6 posts vac</td>
<td>0.8 wte Band 7 • 0.8 wte Temporary Band 6 equivalent PFG funding</td>
</tr>
</tbody>
</table>

**6.2.3 Growth and Nutrition Team (Specialist)**

The Growth and Nutrition team are managed by the Glasgow Community Infant Feeding Advisor (team lead) within Children’s Services (hosted by NW Glasgow HSCP) providing a board wide service.

During the course of the Review the situation has evolved:
- all fixed term or temporary posts were transferred to permanent arrangements
- A specialist G&N advisor postholder retired
- Additional 1 GPwSI session was temporarily funded to cover staff absence

### Table 25: NHSGGC Growth and Nutrition Team (Nov 2017)

<table>
<thead>
<tr>
<th>Community Location</th>
<th>Management</th>
<th>Capacity Nov 17</th>
<th>Capacity March 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 HSCPs (inc 3 Glasgow sectors)</td>
<td>Community Infant Feeding Advisor team lead</td>
<td>1.5 wte Band 6 G&amp;N Advisors 0.4 wte Band 6 Paediatric Dietician 1 GPwSI session (recurring)</td>
<td>0.8 wte Band 6 G&amp;N Advisors 0.4 wte Band 6 Paediatric Dietician 1 GPwSI session (recurring) 1 GPwSI session(temporary)</td>
</tr>
</tbody>
</table>
6.3 Support Workforce

6.3.1 Health Improvement

Within the Public Health Directorate a Health Improvement Lead Band 7 post (approx 0.5 wte) has a remit aligned to MINF (Pre fives). The focus of the core health improvement work programme is maternal nutrition/early years nutrition/healthy weight and Public Health nutrition policy. The remit excludes Infant Feeding/Breastfeeding.

Within Glasgow City further specialist capacity is identified as Health Improvement Senior (Infant feeding) Band 6 – 1.8 wtes.

During the review there has been no change to this capacity.

6.3.2 Dietetics

In addition to the specialist capacity within the Growth and Nutrition team, General Community Dietetics also provide support to MINF through core staffing distributed across 9 health centres in GGC. Whilst difficult to estimate wte the following activities are routinely undertaken:

- Clinical work – assessing and advising both pre-5 and school aged children and families. There is an agreed pathway of which service should see this child.
- Universal Pathway – contributing to the development and content of the pre five nutrition information available to staff.
- Weaning fayres: delivery on a regular and planned annual programme across all HSCPs except West Dun. This would be a minimum of 80 weaning fayres per year.
- Advice to Health Visitors in relation to nutrition
- Setting the table promotion and training to nursery staff in North East, Renfrewshire, Inverclyde
- Staff training delivered to colleagues in Renfrewshire HSCP

6.4 National Infant Feeding Specialist Workforce

Information from other Boards reflects a multi-disciplinary workforce to support infant feeding. In addition to Infant Feeding Advisor (IFA) roles; Maternity Care Assistants (MCAs); Infant Feeding Support Workers (IFSWs); Health Care Support Workers (HCSWs) and volunteers operate in both Maternity and Community settings.

Table 26 below provides a comparison of roles supporting Infant Feeding in NHSGGC and other Scottish Boards. An indicative comparison of the core staff (dedicated wte Band 5 above) per 10,000 births can be seen in the last column indicating that despite the highest birth rate, staffing in NHSGGC is somewhat ‘middle of the pack’ to other areas reflecting the different models described in the report. The geography and scale of service arrangements within NHSGGC; 3 maternity units and 6 HSCPs will also impact on capacity with the need to realistically align resource to local structures. NHSGGC is also different in that there appears to be a more limited skill mix with less Band 2/3/4 staff and volunteers involved in delivering MINF.
Table 26: Multi-disciplinary Infant Feeding Workforce Across Scotland (2017)

<table>
<thead>
<tr>
<th>Health Board and IF team remit</th>
<th>No of CHSP reviews 15/16 (ISD)</th>
<th>Maternity units (in NNU focus)</th>
<th>HSCPs</th>
<th>IFA dedicated posts (approx wte)</th>
<th>Infant feeding wte /10,000 births</th>
</tr>
</thead>
<tbody>
<tr>
<td>GGC (Hospital and community remit)</td>
<td>11,712</td>
<td>3 inc NNU</td>
<td>6 (+3 sectors)</td>
<td>2.2 x Band 7 5 x Band 6 1.8 x Band 6 HI 1 x Band 7 (DMB)</td>
<td>7.7</td>
</tr>
<tr>
<td>Lanarkshire HB (Hospital and community remit)</td>
<td>6,674</td>
<td>1</td>
<td>2</td>
<td>1 x Band 7 1.8 x Band 6 4 x Band 4 30 p/t volunteers</td>
<td>10</td>
</tr>
<tr>
<td>Lothian HB (Hospital and community remit)</td>
<td>9,211</td>
<td>2 inc NNU</td>
<td>4</td>
<td>0.6 x Band 7 2 x Band 6 Band 4 (MCAs) 7 x Band 6 HI 7 x Band 6 0.6 x Band 5 0.7 x Band 4 28 p/t volunteers</td>
<td>2.8</td>
</tr>
<tr>
<td>Ayrshire &amp; Aran HB (Hospital and community remit)</td>
<td>3,324</td>
<td>1</td>
<td>3</td>
<td>0.6 x Band 7 1.8 x Band 6 0.6 x Band 5 0.7 x Band 4 Band 4 (MCAs) ? x Band 4</td>
<td>11</td>
</tr>
<tr>
<td>Forth Valley HB (Hospital and community remit)</td>
<td>2,866</td>
<td>1</td>
<td>2</td>
<td>0.5 x Band 7 1 x Band 6 2 x Band 4 Band 4 (MCAs)</td>
<td>5.2</td>
</tr>
<tr>
<td>Highland HB (Hospital and community remit)</td>
<td>2,799</td>
<td>1 inc NNU</td>
<td>2 inc A&amp;B IJB</td>
<td>0.8 x Band 7 0.6 x Band 6 5 x Band 2 (IFSW) 80 p/t volunteers</td>
<td>5</td>
</tr>
</tbody>
</table>

6.5 Way Forward Discussion

The Core Workforce has benefited from the expansion of posts with remits including delivery of MINF, namely the enhancement of the Health Visiting workforce but also in the introduction of skill mix MCA roles in Maternity Services.

The role of the Specialist Workforce is to provide support to the Core Workforce and direct care to the most complex cases as is described in the Appendix 3.

Community Infant Feeding Advisor capacity is currently weighted towards the ‘Greater Glasgow’ area with limited resource in Clyde. Data presents the greatest breastfeeding challenge within the Clyde area namely West Dunbartonshire and Inverclyde.

The roles of the Health Improvement posts with remits for Infant Feeding also contribute to the delivery of BFI standards as well as activities building wider capacity and cultural change for breastfeeding within the community. However these posts are only located in Glasgow City. Impact on inequalities in breastfeeding rates may be achieved by additional targeted work underway in Glasgow City.

Opportunities to adopt a wider, multi-faceted community approach are limited by the current capacity and skill mix in Clyde with priority being given to BFI standards. The current resource within Clyde is insufficient to support the needs of the 3 HSCPs in Clyde and provide the roles described.

The balance of IFA resource across Maternity and Community also requires to be considered with the potential additional capacity associated with additional roles relating to
the Universal Health Visiting Pathway. Opportunities to embed Infant Feeding development, training and mentoring activities across the workforce should be explored beyond IFA roles.

The alignment of IFAs with maternity units and the gap identified in supporting earlier discharge to Community Midwifery should also be considered in relation to total IFA capacity and job planning.

The role of the current IFAs would benefit from further direction and guidance in order to balance expectations of all parties with capacity and direction to activities with the potential to achieve most health gain for mothers and infants.

The capacity within the current Growth and Nutrition team is insufficient to be scaled up to address increasing levels of overweight in pre-fives. The model of supporting the core workforce is promising and well received however the current model of tiered delivery will require to be revisited to accommodate increasing demand for over-weight support.

The ‘Support Workforce’ should also include wider practice development roles such as practice teachers when considering workforce capacity building along with Health Improvement and Dietetic support.

Multi-disciplinary working across the core, specialist and supporting workforce requires facilitation within NHSGC structures to progress shared areas of responsibility such as policy development and training.
7. Cross Cutting Themes

7.1 Developing Practice for Early Nutrition

A scoping exercise was undertaken by the MINF Pre-five group with representation from Infant Feeding Advisors; Growth and Nutrition Service; Dietetic Service and Oral health to inform this review.

This exercise identified the principle approach of formal face to face training programmes. The content of current training can be linked to the key developmental stages of the new universal health visiting pathway, recognising there is a strong foundation of training and development already in place. However a systematic approach was less evident with training content mainly developed by single professional disciplines creating potential for duplication and gaps within the current support offered. The same audience for training was also identified as an issue.

Engagement with practice teacher roles within children’s services was felt to be advantageous with a view to considering longer term ‘training for trainers’ support from specialist roles.

Opportunities for improvement in the current offer included; training extended to reflect the skill mix including band 2/3/4 roles; incorporation of generic person centred motivational intervention skills; closer links with Oral Health training to create an integrated nutrition and oral health approach; gap in integrated approach to Weaning (foods for 6-12 months) reflecting SACN guidance; lack of practical tools and techniques to improving parental knowledge and confidence in family nutrition.

Gaps included;
- Omission of physical activity within any training despite evidence of positive impact on maternal recovery; post partum weight management and mental health; impact on baby feeding and baby development.
- Maternal post partum weight management was a further gap.

Way Forward Discussion

A comprehensive curriculum is evident as part of the BFI standards described in 4.3 above, lessons building on this approach should be considered for other aspects of infant nutrition with regard to achieving quality assurance.

Development programmes for maternity and early years workforce should primarily relate to the adoption of a patient centred approach, utilising enhanced communication, motivational communication skills and tailoring ongoing support throughout the points of contact.

A co-ordinated and comprehensive (integrated) approach to infant feeding training would be beneficial. The Programme should be adequately resourced in terms of administration to optimise scheduling; co-ordination and facilitate reporting to local teams.

Existing training content for Early Nutrition should be refined to reflect a ‘spiral curriculum’ for the core workforce incorporating maternal nutrition and healthy weight gain; infant feeding and complimentary feeding. An increased focus on early years weight management (based on family meals) and associated topics particularly physical activity should be included.
Practice development should extend beyond face to face training approaches and consider innovative tools and techniques to support professionals in practice. The potential of eLearning for core education / evidence updates should be explored.

Whilst face to face training is highly valued by all stakeholders this should be focused on practice development; interactive skill development and case study based learning techniques to optimise impact.

Content should be explicitly applied to key stages in the Antenatal / NUP scheduled visits and be regularly updated to reflect Scottish Government / UNICEF training developments and new evidence (SACN) when available.

7.2 Infant Feeding Strategy

The NHSGGC Infant Feeding Policy and strategic approach should be refreshed to reflect the content of this report and the SACN publication. Responsibility for infant feeding strategy within NHSGGC is not clear. In the absence of dedicated capacity to lead MINF policy development the proposed new MINF structures should more fully address this remit and specific roles within existing capacity agreed. Opportunities to expand leadership for this work programme should continue to be considered by MINF.

Development of a comprehensive infant feeding pathway which applies evidence and national policy into practice within NHSGGC would be beneficial, working across multiple professional groups and services.

The concept of an infant feeding pathway requires to be both firmly rooted in current practice and service arrangements, but sufficiently supportive of conceptual change to deliver continuous improvement in the infant feeding experience for mothers. This pathway should be led and owned by multi-disciplinary midwifery and health visiting teams.

The concept of an infant feeding pathway is supported by stakeholders who would value being involved in its development. The use of Improvement Methodology/ Test for Change was seen as an important approach in developing this pathway.

Performance measures now embedded within eHealth developments will enable more robust monitoring of this pathway than previously possible. The role of Public Health should be considered in developing this approach.
8. Engagement

An initial draft of the MINF review was widely circulated to stakeholders for the purposes of staff and management engagement. Feedback was received from numerous sources and over the period of approx 6 months the content of this report has evolved to reflect this feedback.

As part of the engagement 2 structured engagement sessions were held and feedback is reported below:

8.1 Maternity Services

A session was held with Infant Feeding Advisor staff in October 2018 to consider the content of the draft review and provide feedback as part of the finalisation of the report. The session comprised Infant Feeding Advisors; Staff-side Representation; HR; Midwifery Professional Lead and Paediatric management as well as Public Health who presented a summary of the report. The themes from the discussions are presented below and reflect notes from the meeting and subsequent comments received.

A number of key themes were identified:

8.1.1 Infant Feeding Pathway

In general, the consideration of an infant feeding pathway concept as part of the universal antenatal / health visiting pathways was welcomed. The need to ensure this supported BFI principles especially in relation to feeding intention was agreed.

8.1.2 The Role of Maternity Care Assistants

The role of trained infant feeding support workers is highlighted within the report and reflects recent MINF investment allocations within NHSGGC. Similar roles are utilised within other Health Boards and proposals to expand the multi-disciplinary approach to infant feeding support are outlined in the report recommendations. Additional funding for MCAs has been received from Scottish Government with a view to develop an evaluation framework exploring the role as part of the postnatal ward teams. Achieving optimum practice by the MCAs was a priority and the teaching and placement experience provided by University would be considered as part of the evaluation. Opportunities to influence the role of the MCAs going forward were identified including training; mentoring; ongoing support and induction to NHSGGC Policy. A collaborative approach to the development of the role was proposed.

8.1.3 Midwifery Support for Breastfeeding

A recommendation within the draft report suggested further consideration of leadership for Breastfeeding and BFI Standards in all parts of NHSGGC. Opportunities relating to the development of Breastfeeding Champions within maternity services and ways to increase motivation of staff at ward level were explored. Local ownership of performance was felt to be key and localised, timely data would help support this focus. The strengthening of midwifery ownership of breastfeeding and increasing core skills within the workforce was a strong theme. The role of the IFA working alongside ward teams proposed in the report was also discussed with the expectation that this should not dilute the midwifery effort but support the ward teams to improve practice.
8.1.4 **Training and Education**

It was acknowledged that national developments would become available in the new year and this would impact on the training and education activity of IFAs. A review of the training programme would be required but the need to support e-Learning activities with skill based support was agreed.

8.1.5 **Frenotomy**

Specific queries regarding the data presented in the engagement report would be further explored however the sustainability of the service and the impact of frenotomy on breastfeeding outcomes were discussed. The frenotomy service was seen as part of the specialist service provided for mothers with feeding problems and should be considered further as part of discussions relating to the tiered service model proposed in the report.

8.1.6 **Breast Pumps**

The logistic challenges facing the current pump service were acknowledged and the additional funding secured from Scottish Government to test a community pump loan service should be considered together. Opportunities to explore charitable support for logistics followed up.

8.1.7 **Workforce**

The alignment of IFAs with local maternity teams outlined within the report was discussed and a number of strengths and weaknesses identified. It was agreed that capacity and structure would be discussed in detail as part of the implementation arrangements and a working group would be established to support this.

8.2 **Children's and Family Services**

A session was held with Community Children's and Family Team representatives (Health Visitors / team lead/ Senior Nurses); Community Infant Feeding Advisors and Health Improvement Infant feeding staff in late December 2018. An overview of the report was presented by Public Health. The themes from the discussions are also presented below:

Key themes included:

8.2.1 **Strengthening Health Visiting Teams**

The focus on strengthening the skills of MDT Health Visiting teams (inc students) was acknowledged including the recognition that in some areas opportunities for practical experience in working with breastfeeding mothers was limited. Building capacity locally at a HSCP level was preferred with examples of BF champions within teams and mentoring roles given rather than relying solely on the core training available. Early exposure for students and new graduates with breastfeeding mothers was specifically highlighted. Building confidence with staff regarding time to establish feeding; being realistic about common problems and taking a mother centred and asset based approach were areas felt to be important. A level of reluctance for all team members to buy in to breastfeeding was acknowledged and wider culture work was also identified. A stronger focus on supporting motivation with families was highlighted and it was felt that this could build on Solihull and Motivational Interview (inc Connecting Parents) programmes already available across the Board which could be made more widely available. The potential scope for support staff to support BF (inc Infant Feeding Support Workers/ nursery nurses etc) was felt to be varied as the number of Health Visitors increase within the teams so the emphasis should be on HV teams rather than specific roles.
8.2.2  Specialist Support

The potential to provide local support was widely welcomed and the tiered approach widely discussed. Opportunities to strengthen community advice and provide early support were identified using local BF champions and local support groups (inc 3rd sector) as the first line. There was an appetite to look at the role and location of community support groups in order to develop (and test) earlier support models. The need to maintain current investment (HV time) in support groups but explore new ways of working was highlighted including the potential to align support groups with local BF clinics was raised. Concerns over the current model related to late presentation of problems and increased complications with evidence of early support not having been provided and the large numbers of mothers being referred to the clinic model. The need for specialist support to be freed up to see the most complex cases was agreed.

8.2.3  BFI Sustainability

Variations in local approaches to the BFI assessment process were described and in general the opportunity to increase the range of staff involved in the audit process and focus on a more sustainable approach provided by the Gold Award was recognised.

8.2.4  Infant Feeding Pathway

The concept of an infant feeding pathway, with key elements embedded within the Universal Health Visiting Pathway was generally welcomed but it was felt this needed to be worked up in more detail with clear understanding of the additionality over and above the NUP. The concept was particularly valued in the context of supporting shared care and transitions. Key elements discussed included ‘core info’ to be recorded (feeding assessment / feeding plans) and tracked through from antenatal; discharge and community discharge and handover at day 10. The potential for eHealth; Badgernet/ GIRFEC to support this was recognised but needed further investigation. Evaluation of the pathway and local data were felt to be key to promote sustainability of the pathway- ‘we need to know it is working’. The role of the MCAs within community midwifery was debated with the desire to see these roles supporting transition at day 10 expressed with the Lanarkshire model referenced.

8.2.5  System-wide Support

Opportunities for practitioner networking (with special interest) to enabled shared learning and development were proposed. The potential to combine smaller areas of expertise such as Health Improvement to work as combined resource rather than HSCP linked was also suggested.

8.2.6  Family Meals and Healthy Weight

It was felt there was good practice to build on in relation to establishing family meals and information resources available. The focus on linking this to the Universal HV Pathway was supported and the work of the training group looking at this in more detail acknowledged. The need to establish a clear focus to in order to better define the approach to healthy weight by Child and Family teams including the role of the HV and wider staff groups was widely supported. There was recognition that further discussion as a profession would be required but enthusiasm to support best practice. It was proposed that a link to the Universal Pathway Overseeing Group would be established in order to undertake further scoping work undertaken. The availability of appropriate programmes and support services was an identified key factor in addressing Child healthy weight going forward.
9. Outcomes and Evaluation

The SACN 2018 Infant feeding report; and planned SACN review of nutrition 1-4 yrs provides high quality evidence which underpins this review.

The availability of robust evaluation of maternal and infant feeding developments which apply the evidence within delivery models is generally more limited and as such a clear evaluation and monitoring framework for the ‘delivery in practice’ of future developments is important.

A consistent and co-ordinated approach to monitoring data is also required for core services and a corporate infant feeding dashboard is currently being developed. This will be developed with stakeholders across NHSGGC. The ongoing service activity and performance monitoring approach at unit/partnership level is recommended going forward.

The primary outcomes proposed within the review have been identified as:

Outcome 1: Healthy maternal weight gain
Outcome 2: High quality infant feeding experience
Outcome 3: Management of infant healthy weight in community

A series of Outcome Measures are proposed in Appendix 4.

Figure 2: Driver Diagram is provided below:
9.1 Local Evaluation

All MINF proposals were considered by Research and Evaluation colleagues in Nov 2012 and detailed commentaries to support evaluation of investment were outlined at this stage however, in most cases detailed evaluation was not undertaken and it has been challenging to identify monitoring data in relation to a number of aspects of current MINF expenditure.

Generally, robust evaluation reports for Board level interventions are very limited across Scotland and it is imperative that NHSGGC contributes to the expansion of knowledge base of ‘what works’ to improve maternal and infant nutrition.

9.2 Way Forward Discussion

It is recommended that evaluation is undertaken for new investments or aspects of specific change including the Programme for Government Projects. Specific areas which would benefit from evaluation within this review include:

Outcome 1: Healthy maternal weight gain
- Maternal healthy weight intervention and referral
- Increased targeted uptake of free vitamin entitlements

Outcome 2: High quality infant feeding experience
- Skill mix developments within Maternity; Community Midwifery; Child and Family Teams including Maternity Care Assistant evaluation
- Opportunities to undertake ‘tests of change’ to strengthen maternity unit and child and family team’s ownership of BFI standards and MINF improvement activities including enhanced training and mentoring development within core workforce
- Adoption of infant feeding pathway with and continuity of care from Community Midwifery to Health Visiting with structured IF support
- Application of tiered service model for Infant Feeding specialist support
- Revised elements of the infant feeding model (such as: antenatal developments; Infant feeding planning; inclusion of ‘Mastery Concepts’; changes to maternity environment; breast pump development and proactive access to breastfeeding support; menu of breastfeeding support as well as child healthy weight intervention etc)
- Action research within defined communities to identify Infant feeding support needs

Outcome 3: Management of infant healthy weight in community
- Maternal and Infant nutrition interventions linked to the Universal Pathway such as defined weaning intervention at 3 and 4 month visits;
- Revised training / practice development support for MINF within Universal Pathway delivery
## 10. Recommendations

### 10.1 Maternal Nutrition

<table>
<thead>
<tr>
<th>Stage</th>
<th>Recommendation</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preconception</td>
<td>1. Continue to promote healthy weight as part of national preconception action plan across the population.</td>
<td>Public Health</td>
</tr>
<tr>
<td></td>
<td>2. Scope targeted support for weight management through family planning and assisted-conception services.</td>
<td>Public Health</td>
</tr>
<tr>
<td>Antenatal</td>
<td>3. Establish healthy weight gain support within antenatal pathway including eHealth referral; staff training and Live Active referral.</td>
<td>Maternity Services</td>
</tr>
<tr>
<td></td>
<td>4. Explore funding opportunities to provide healthy weight gain nutritional intervention within National Healthy Weight Strategy / Diabetes prevention.</td>
<td>Public Health / Community Dietetics</td>
</tr>
<tr>
<td>Postnatal</td>
<td>5. Scope postnatal GCWMS pathway at 6 mths for gestational diabetes mothers.</td>
<td>Public Health</td>
</tr>
<tr>
<td>Pre Conception/ Antenatal/ Postnatal</td>
<td>6. Undertake local promotion of Best Start / Healthy Start vitamins to promote nutrition for pregnant; breastfeeding women and children.</td>
<td>Public Health / Maternity Services</td>
</tr>
</tbody>
</table>

### 10.2 Infant Feeding

<table>
<thead>
<tr>
<th>Area</th>
<th>Recommendation</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>System-wide Leadership and management</td>
<td>7. Establish a shared service management group to oversee implementation of the Infant Feeding pathway across NHSGGC leadership</td>
<td>W&amp;C Director</td>
</tr>
<tr>
<td>Policy Development and Leadership</td>
<td>8. Establish clear leadership for arrangement and an Infant Feeding / Early Years Nutrition policy and practice developments linked to the review within NHSGGC. Establish a practice development post should funding be identified</td>
<td>W&amp;C Director / Director of Public Health</td>
</tr>
<tr>
<td>Local Leadership (HSCP/Maternity Unit)</td>
<td>9. Review local arrangements to co-ordinate Infant Feeding activity in each entity to:</td>
<td>Maternity Services / Children’s Services</td>
</tr>
<tr>
<td></td>
<td>• Monitor IF performance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• adopt a whole system approach to implement BFI sustainability / Infant feeding pathway and wider culture change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Undertake improvement activities to address issues</td>
<td></td>
</tr>
<tr>
<td>BFI Sustainability</td>
<td>11. Adopt skill mix approach to implementation of BFI standards in all areas. Explore opportunities for eHealth approach to Audit.</td>
<td>Maternity Services / Children’s Services</td>
</tr>
<tr>
<td>Infant Feeding Training</td>
<td>12. Establish a MDT Advisory group to review and develop a co-ordinated approach to Infant feeding/ Early Years Nutrition training linked to NUP and Scottish Government developments</td>
<td>Public Health</td>
</tr>
<tr>
<td>Specialist Infant Feeding Support</td>
<td>13. Test a tiered approach* to Specialist Infant Feeding support for early intervention in feeding problems and early management of weight loss.</td>
<td>Maternity Services / Children’s Services</td>
</tr>
<tr>
<td></td>
<td>14. Undertake business development to ensure evaluation of impact in relation to Mentoring Support; Case Management and Breastfeeding Clinics</td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>Recommendation</td>
<td>Lead</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>
| Frenotomy and BF clinic                                   | 15. Review referral and operational arrangements for breastfeeding clinics with a specific focus on pathway provision. Evaluate the impact of interventions  
16. Review frenotomy referral pathway and criteria and evaluate impact on feeding outcomes | Maternity Services / Children’s Services                                     |
| MDT Infant Feeding support model                         | 17. Test and evaluate additional proactive infant feeding support linked to the revised postnatal pathway. Provided by MCAs in Maternity and C&F Teams in community. | Maternity Services / Children’s Services                                     |
| Specialist Infant Feeding Advisors                       | 18. Strengthen alignment with local Maternity / Neonatal Team leads to support job planning.  
19. Establish a Midwifery professional lead for Infant Feeding.  
20. Maintain system-wide IFA networking | Maternity Services                                                          |
| Infant Feeding Development                               | 21. Explore skill mix opportunities to support IFA in Clyde (similar to GG) to reflect BFI Gold Standard whole system approach | Health Improvement            |
| Breast Pump                                               | 22. Explore service development of recovery and community pump lending and recovery services with Third Sector. Evaluate impact of pump schemes | Public Health / Health Improvement                                           |
| Antenatal Care                                            | 23. Undertake review of Antenatal intervention; continuity of care and targeted support in line with Best Start Programme. | Maternity Services             |
| Antenatal Care/Postnatal Care                            | 24. Develop a standardised Mother Centred Infant Feeding Plan across the infant feeding pathway. | Maternity Services             |
| Antenatal Care                                            | 25. Test development of ‘one good supporter’ model for Dads; Families and BME to reduce attrition rates | Health Improvement             |
| Community Support                                         | 26. Develop a Quality Assurance framework to maximise impact of current peer support groups/ Cafes/ peer support to address needs of specific groups including; BME / Deprived Communities / Solo Mothers as part of a ‘menu’ of support. | Health Improvement / Children’s Services                                    |
| 10.3 Early Years Nutrition                                | **Area** Recommendation**                                                      | **Lead**                      |
| Specialist Growth and Nutrition Advisors                  | 27. Maintain a tiered approach* to Specialist Growth and Nutrition support for faltering growth and early management of weight loss.  
28. Mainstream MDT team with Child and Family Teams | Children’s Services                                                          |
| Infant Feeding/Early Years Nutrition Training             | 29. Explore funding opportunities to expand MDT tiered approach to address healthy weight intervention within National Healthy Weight Strategy. | Public Health/Children’s Services / Dietetics                                |
| Policy Development and Leadership                         | See recommendation 11.                                                        | Public Health                  |
| See recommendation 7.                                    | W&C Director / Director of Public Health                                     |

A tiered approach*
Tier 1 – Mentoring of Midwife / Health Visitor to undertake care planning
Tier 2 – Structured Case Management support with Midwife / Health Visitor
Tier 3 – Case Intervention on Ward or BF Clinic (or accompanied Home visit in relation to G&N)
11. Implementation

11.1 Leadership

There is little doubt that Maternal and Infant Nutrition requires ownership by many professional groups and service areas. Current professional leadership and management for the MINF is distributed across 6 HSCPs / 3 maternity units with Midwifery; Children and family; Acute neo-natal; Infant feeding advisors; Health Improvement and Public Health roles equating to 16 points of management or professional leadership for related activities.

The review highlighted a number of key issues which suggest a revision of operating arrangements is necessary to provide the whole system leadership required to promote Maternal and Infant Nutrition across NHSGGC. These included:

- Governance - the need to establish a Board-wide strategic reporting arrangement for MINF activity
- Strategic Development – ongoing development and senior leadership for MINF embedded within the wider policy context
- Operational Delivery – delegated responsibility across 16 management points requires co-ordination; service management and performance measures
- Professional leadership - requires to be engaged to ensure MINF activity is embedded within core practice (Midwifery; Child & Families; Dietetics; Medical and Health Improvement)
- Facilitation – MINF Group operating arrangements require to be fit for purpose

The working arrangements for the infant feeding advisors is worthy of specific consideration. The co-operative working demonstrated across the infant feeding team has been a real asset in maintaining a Board-wide service model. Whilst described within the report as Maternity and Community this is in reality an artificial split reflecting management arrangements rather than collaborative working across organisational boundaries. Current management arrangements do not limit this and it is recommended that any change to future leadership and working arrangements should continue to benefit a whole system approach.

Following the engagement period of the review proposals for future arrangements were developed in line with the following recommendations:

- Establish a shared service management group to oversee implementation of an Infant Feeding pathway across NHSGGC
- Review local arrangements to co-ordinate Infant Feeding activity in each entity

11.2 Way Forward Discussion

This report proposes that to implement the above recommendations that the current MINF group (and sub groups) are replaced by a series of new arrangements as follows:

11.2.1 MINF Strategy Group

Remit: To provide strategic direction, for Maternal and Infant Nutrition policy through facilitation of effective action across NHSGGC operating arrangements; monitor progress on KPIs and provide assurance to Child & Maternal Health Strategy Group regarding quality and best practice and direct resource allocation as appropriate.
Reporting: The MINF Strategy Group will report to the NHSGGC Child & Maternal Health Strategy Group

Membership: Professional leads and Service Manager representatives

Co-Chair: Director W&C and CO HSCP

11.2.2 MINF Operational Group

Remit: To ensure a co-ordinated approach to the implementation and monitoring of Maternal and Infant Nutrition Policy; maintain BFI Standards and deliver MINF Review implementation and Breastfeeding Programme for Government projects.

Responsibility for implementation of MINF Policy and BFI Standards lies with each Health and Social Care Partnership as well as Maternity Services (Women’s and children’s Directorate) however the Operational Group will identify and co-ordinate collective priorities; share learning to ensure accessible services in all areas; monitor and report progress and provide quality assurance to the MINF Strategy Group. This will include the use of participatory approaches/user feedback to gain the insight and opinions of target groups going forward.

Reporting: The MINF Operational Group will report to the MINF Strategy Group

Membership: Community BFI leads; Service Managers; Maternity BFI leads; Health Improvement leads

11.3 MINF Implementation Work Streams

It is proposed that a series of ‘task and finish’ working groups are established to operationalise the recommendations within the review. Groups will comprise multi-disciplinary staff groups and Staff-side representation and will be led jointly by Maternity and Community colleagues to ensure NHSGGC wide consideration and approach. The working groups proposed include:

Infant Feeding: Maternity/Neonatal / Community Joint Leadership
a) Training and Education (BFI core programme; National Module co-ordination; Mentoring programme)
b) Specialist Infant Feeding Support (BF Clinics; Referral management; Frenotomy; Tiered specialist support model)
c) Antenatal / Universal Infant feeding pathway (feeding preparation; infant feeding plan and assessment; support provision; transitions)
d) Breast Pumps (distribution and recovery; integrated provision; referral criteria; impact monitoring)

Infant Feeding: Maternity/Neonatal
e) Postnatal MDT approach (MDT teams; tiered specialist support model; MCA development; Community Midwifery support)
f) Workforce – Maternity

Infant Nutrition: Community
g) Weaning & Family Diet and early years Healthy Weight (Universal HV pathway support; faltering growth / healthy weight (Inc Growth&Nutrition); workforce development)
Longer-term arrangements are needed to support Infant Feeding within each entity this will include:

- **HSCP MINF Groups (x6) BFI Sustainability Leadership** *(performance management/ BFI co-ordination/BF Programme for Government projects/ BF community support)*
- **Maternity Unit MINF Groups (x3) BFI Sustainability Leadership** *(performance management/ BFI co-ordination)*

**11.4 MINF Practitioner Network**

Benefits of close working arrangements across Maternity; Neonatal; Community; Health Improvement and wider colleagues are described within the review. This has supported interdisciplinary working; knowledge of practice; knowledge of local communities and knowledge of local units and ways of working. The review recommends that the system-wide Infant Feeding Advisor networking is maintained and broadened out to other relevant practitioners supporting MINF. A series of Rapid Stakeholder Events or workshops to engage staff; share best practice; inform development of the MINF programme going forward are proposed (annually).

A schematic of proposed arrangements is available in Appendix 5.
### 12. Financial Framework

<table>
<thead>
<tr>
<th>Budget Allocation</th>
<th>Recurring</th>
<th>Non Recurring</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINF - £450,250</td>
<td>Programme for Government SGHD Funding (1-3 yrs): £ 246,000</td>
<td></td>
</tr>
</tbody>
</table>

Please note: additional recurring funding also available in local HSCPs

<table>
<thead>
<tr>
<th>Outcome</th>
<th>2018/19</th>
<th>Resource</th>
<th>Cost (£)</th>
<th>Resource</th>
<th>Cost (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant Feeding</td>
<td></td>
<td>Infant Feed Advisors (IFA) B6 3.3 wte (Hospital Based)</td>
<td>£161,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infant Feed Advisors B7 0.95 wte</td>
<td>£51,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IFA (community based)</td>
<td>£57,000</td>
<td>Peer Support BME / Polish - (Glasgow City)</td>
<td>£50,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Breast Pump Pilot - (Glasgow City)</td>
<td>£25,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IFSW- (East Dun)</td>
<td>£46,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support Maternity Care Assistants (MCA) (salary in training) 10 wte</td>
<td>£90,000</td>
<td>MCA - (W&amp;C)</td>
<td>£100,000</td>
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<tr>
<td></td>
<td></td>
<td>Support for MCA course fee</td>
<td>£20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non Pay costs including travel, course fees, Kit rental and UNICEF baby friendly costs</td>
<td>£38,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infant Nutrition</td>
<td></td>
<td>Dietician Support (community based)</td>
<td>£19,000</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre School Nutrition Support (GPwSI medical session)</td>
<td>£12,000</td>
<td></td>
<td></td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
<td>£448,000</td>
<td></td>
<td>£271,000</td>
</tr>
</tbody>
</table>
Appendices

Appendix 1: Service Developments

Most significantly will be the consideration of infant feeding within the Best Start and Universal Health Visiting Pathway Developments.

1. The Best Start – A Five Year Forward Plan for Maternity and Neonatal Care in Scotland

The Best Start review makes it clear that the decision on how women choose to feed their baby is one of the most important early decisions faced by a new mother. During the review, many women described excellent support and advice while other reported a lack of postnatal support and inconsistencies in advice. The review was clear that good quality breastfeeding support services are best provided by a range of support services to meet the needs of the mothers and their infants.

Recommendation 24 within the review document recommends that the new model of continuity of carer, community hubs and enhanced community care will provide an environment to support breastfeeding. Community-based care will include a role for support staff to assist midwives in the provision of baby care, including breastfeeding support and parenting skills, along with care and support for women who formula feed.

2. Universal Health Visiting Pathway

The Universal Health Visiting Pathway will be implemented in NHSGGC in 2018. The pathway presents a universal core home visiting programme for all families by Health Visitors to promote, support and safeguard the wellbeing of children by providing information, advice and support and help to access services. The underlying principles are:

- Promoting, supporting and safeguarding the wellbeing of children
- Person centeredness
- Building strong relationships from pregnancy (32 week antenatal visit)
- Offering support during the early weeks and planning future contacts with families
- Focusing on family strengths, while assessing and respectfully responding to their needs

Table 18: Outlines Universal Health Visiting Pathway Recommendations in Relation to Infant Nutrition

<table>
<thead>
<tr>
<th>Contact</th>
<th>Recommendations from Revised Universal Pathway Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-birth 32-34 weeks</td>
<td>Assessment and support for infant nutrition; making an informed feeding decision, benefits of breastfeeding, value of skin to skin and support decision making and access to Support Workers for breastfeeding including in reach to post-natal ward</td>
</tr>
<tr>
<td>11-14 days. (include the 1st HV assessment and IF data collection)</td>
<td>Engage and share public health information and guidance to promote positive attachment and health and wellbeing including improved nutrition.</td>
</tr>
<tr>
<td>3-5 week visit</td>
<td>Engage and share public health information and guidance to promote positive attachment and health and wellbeing including improved nutrition</td>
</tr>
<tr>
<td>6-8 week visit –(includes assessment and IF data collection)</td>
<td>Parents/careers receive appropriate public health advice to maximise child wellbeing.</td>
</tr>
</tbody>
</table>
Within NHSGGC, proposals suggest that the Revised Universal Health Visiting Pathway will be implemented from 2018 starting with babies whose mother’s booked for antenatal care on the Bagder Net IT system from 6th November 2017. This will allow data to be collected from Badger Net for the post delivery feeding status.

The 32 week antenatal contacts will start from week beginning 18th June and the babies will be born from 8th August onwards, assuming 40 weeks gestation.

The Revised Universal Pathway will also result in an increase in the Health Visitor numbers across all sites in NHSGGC. It is projected an additional 192 Health Visitors will be recruited on a phased basis, 53% by January 2018, 80% by September 2018 and 100% recruitment completed by January 2019.

NHSGGC will also have a complement of 50 Practice Teachers and discussions are required to investigate how they can support Health Visiting staff and Infant Feeding Advisors in terms of training needs, training provision, support for BFI standards and local audits.
Appendix 2: Key Informants / Stakeholders

- Infant feeding Advisors Maternity / Donor Milk Bank Co-ordinator
- Infant feeding Advisors Community
- Lead Nurse Neonates and Paediatrics
- Lead Nurse Midwifery
- Head of Midwifery
- CSM Neonates and Paediatrics
- CSM Community Midwifery
- Consultant Neonatologist
- Head of Health Improvement Glasgow City
- Head of Planning and Health Improvement East Dunbartonshire
- Growth and Nutrition Advisors / GPwSI / Professor of Community Child Health
- Locality Children’s Services Manager NW Glasgow
- Senior Nurse Manager Children And Families East Renfrewshire
- Manager Community Dietetics / Manager Paediatric Dietetics
- Operational Manager Oral Health Directorate
Appendix 3: Infant Feeding Team Role

Breastfeeding support is provided by the Infant Feeding Team. The role of the infant feeding team extends to both maternity and community settings and supports the delivery of BFI standards through the following functions;

- The provision of training on infant feeding BFI accredited training for Maternal & infant Nutrition in line with BFI standards to all midwifery, neonatal, paediatric and child and family team staff.
- The undertaking of audit activity to support compliance with BFI standards and prepare for reassessment. To ensure the maintenance of standards in line with BFI, including continued implementation, evaluation and audit of care standards.
- The provision of breastfeeding clinics (specialist support for feeding difficulties. To support mothers with complex feeding issues. In addition direct support to mothers on maternity wards is also provided.
- Mentoring of maternity staff within maternity unit wards, neonatal units and Children and family teams within community to provide ongoing support for mothers.

Community

In addition to the roles of the infant feeding team described in the above the Infant Feeding Advisors based in the community also provide wider support across Health and Social Care Partnerships. Essentially this can be described as:

- The development and management of infant feeding initiatives within community
- Promotion of Breastfeeding support opportunities for parents including third sector
- The provision of leadership for local MINF groups to ensure local activities related to maternal infant nutrition are co-ordinated and multidisciplinary in nature
- The promotion of breastfeeding aspiring to develop a social norm through BF welcome award; employer accreditation etc.
### Appendix 4: MINF Outcome Measures

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Measure</th>
<th>Indicator</th>
<th>Data Source</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Maternal Weight Gain</td>
<td>Weight Gain in line with IOM guidance</td>
<td>Number of HW mothers @ booking</td>
<td>Badgernet</td>
<td>annual</td>
</tr>
<tr>
<td></td>
<td>Healthy weight intervention</td>
<td>TBC Workforce trained</td>
<td>Badgernet</td>
<td>annual</td>
</tr>
<tr>
<td></td>
<td>Uptake of weight loss interventions @ 6mths</td>
<td>WM Referrals &gt;5% weight loss</td>
<td>GGC WM database</td>
<td>quarter</td>
</tr>
<tr>
<td>Quality Infant feeding experience</td>
<td>Increased rates of BF</td>
<td>Excl BF / MF @ first feed</td>
<td>Badgernet</td>
<td>quarter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Excl BF / MF @ discharge</td>
<td>Badgernet</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Excl BF / MF @ first HV</td>
<td>EMIS/ CHSP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Excl BF / MF @ 6-8wks</td>
<td>EMIS/ CHSP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drop off Ever BF to 6-8 wk</td>
<td>EMIS/ CHSP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BF cessation rate</td>
<td>EMIS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduced demand for specialist support</td>
<td>Reduced BF clinic referrals</td>
<td>Trakcare</td>
<td>quarter</td>
</tr>
<tr>
<td></td>
<td>High levels of maternal satisfaction</td>
<td>Maternal Satisfaction</td>
<td>BFI audit data</td>
<td>quarter</td>
</tr>
<tr>
<td></td>
<td>Increased scrutiny of BFI implementation</td>
<td>BFI Accreditation Supplementation Staff trained/competence</td>
<td>BFI Audit data</td>
<td>quarter</td>
</tr>
<tr>
<td></td>
<td>Culture supporting BF</td>
<td>Number of Cultural change initiatives</td>
<td>Local data</td>
<td>annual</td>
</tr>
<tr>
<td>Good Infant nutrition established</td>
<td>Healthy Infant Weight est. in community</td>
<td>% HW centile @ % HW @ 30 mths</td>
<td>EMIS/ CHSP</td>
<td>annual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% HW @P1</td>
<td>EMIS/ CHSP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>% DMF Teeth @ P1</td>
<td>CHSP SDIP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Healthy Infant Weight est. in community</td>
<td>Referrals to G&amp;N</td>
<td>EMIS</td>
<td>quarter</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Referrals to Com Paeds</td>
<td>EMIS</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>EMIS ?</td>
<td></td>
</tr>
<tr>
<td>Delayed weaning to 6 mths</td>
<td>Weaning initiated age</td>
<td>EMIS</td>
<td>quarter</td>
<td></td>
</tr>
<tr>
<td>Family meals intervention</td>
<td>TBC Workforce trained</td>
<td>TBC HealthPlan?</td>
<td>TBC</td>
<td></td>
</tr>
<tr>
<td>Uptake of Healthy Start Vitamins</td>
<td>Breastfeeding mothers Pre5 eligible Pre5 purchased</td>
<td>Pharmacy</td>
<td>TBC</td>
<td></td>
</tr>
</tbody>
</table>

*NB: All measures in italics require further development*
Appendix 5: Schematic of Proposed Structure

Child and Maternal Health Strategy Group

MINF Strategic Group

MINF Operational Group

Joint Task Finish Groups
a) Training and education
b) Specialist support
c) Infant feeding pathway
d) Breast pumps

e) MDT approach
f) workforce

Maternity/Neonatal

Community
BF Programmes for Government

Community
Weaning and family diet / healthy weight

Refreshed:
- Maternity units
  > PRM
  > QEUH
  > RAH

Refreshed:
- HSCP MINF
  > ED
  > WD
  > ER
  > REN
  > IC
  > Glasgow
Ajetunmobi, T. & Whyte, B., 2012 GCPH Breastfeeding Project: Investigation of Breastfeeding Rates in Deprived Areas. GCPH


Heslehurst, N. et al., 2015. An evaluation of the implementation of maternal obesity pathways of care: a mixed methods study with data integration. *PLOS.*


Lee, E., 2011. *Feeding babies and the problems of policy,* s.l.: Centre for Parenting Culture Studies, University of Kent.


NHS Tayside, 2006 (no author) Internal report unpublished

NICE, 2005. Division of ankyloglossia (tongue-tie) for breastfeeding. Interventional procedures guidance [IPG 149]

NICE, 2010. *Weight management before, during and after pregnancy*, s.l.: NICE.

NICE, 2013. *Weight management: lifestyle services for overweight or obese children and young people*, s.l.: s.n.


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Shakya, P. et al., 2017. Effectiveness of community-based peer support for mothers to improve their breastfeeding practices: a systematic review and meta-analysis. *PLOS ONE.*


Wahedi, M., 2016. Should midwives consider associated psychological factors when caring for women who are obese?. *BJM,* 24(10).
Wellings, K; Jones, K; Mercer, CH; Tanton, C; Clifton, S; Datta, J; Copas, AJ; Erens, B; Gibson, L; MacDowall, W; Sonnenberg, P; Phelps, A; Johnson, AM; (2013) The prevalence of unplanned pregnancy and associated factors in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3). Lancet ISSN 0140-6736 DOI: https://doi.org/10.1016/S0140-6736(13)62071-1
