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### Digital appendix

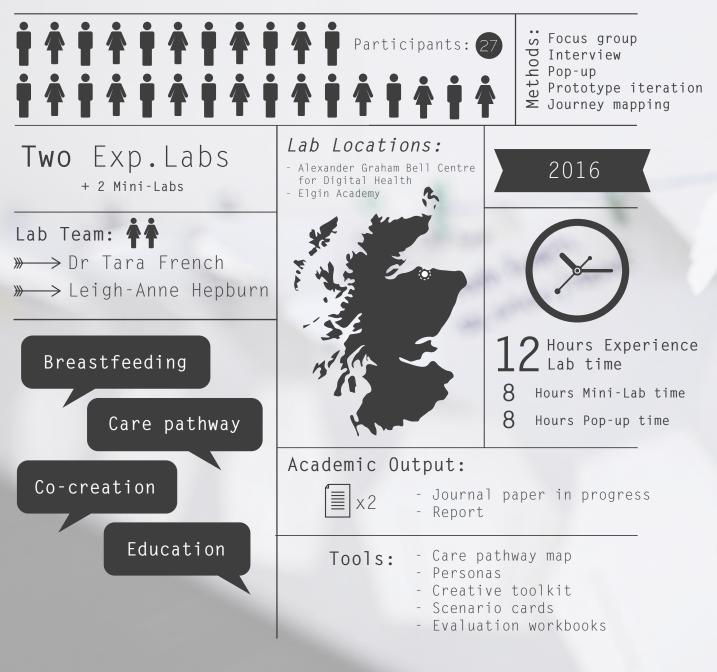
- A: Preferred Care Pathway
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- .....



NHS Grampian / University of the Highlands and Islands / Glasgow School of Art

### Breastfeeding

The project employed a user-driven approach to develop new ways of promoting breastfeeding among new mothers and young people, identifying ways in which women want to be supported, how health professionals want to provide that support in practice, in order to achieve informed baby feeding decision making.



Other peoples experies Expe form expectations -both good + bad (family /friends) en fold expectan Eader repla 

### "It's not so much a decision whether to breastfeed or not because I think people make that decision ... it's the realistic expectations at that point, if you decide you want to breastfeed or you are interested in breastfeeding, what do you then do to help that woman to establish her networks"

- Lab Participant





Executive Summary

Breastfeeding rates in the UK continue to be among the lowest in Europe, despite evidence supporting that increased breastfeeding has the potential to improve the health of both mother and baby. In Scotland, breastfeeding rates are poor and static. Recognising that cocreated, iterative methodologies, and a 'bottom up' approach have the potential to develop more person-centred service innovation, this project brought together end users and key health professionals to design

interventions tailored to empower and motivate users.

The aim of the research project was to employ a user-driven approach to develop new ways of promoting breastfeeding among new mothers and young women. Key to this aim was to identify ways in which women want to be supported: the methods, models and timescales of information sharing and support provision as well as identifying how health professionals want to provide







that support in practice. The project sought to develop a model of delivery that meets the needs of all groups and has a positive impact on baby feeding decision-making.

The project involved a series of Mini-Labs and Experience Labs involving participation of new mothers, health professionals, health academics and young people. The Labs were designed to capture the experience and knowledge of baby feeding decision making, and identify preferred methods of support and promotion with respect to breastfeeding.

The findings of the Labs illustrate the individual, social, cultural, and societal challenges around breastfeeding and the need for a collaborative approach in designing support and promotional materials tailored to meet the needs of each group.

Future recommendations are suggested relating to five key areas of opportunity: exploring

the care pathway, developing a single maternity service voice, developing a tailored educational programme for schools, the potential of community collaboration, and the co-design requirements of a new website.

### **Experience Labs**

The Experience Lab was developed by the Institute of Design Innovation at The Glasgow School of Art.

The Experience Lab offers a safe and creative environment where researchers, businesses, civic partners and service users can collaborate on innovative solutions to the health and care challenges facing our society.

Researchers use current and emerging design research methods to engage with our partners and participants, who are encouraged to share their own experiences. Real-life practice is often replicated to allow new technology, services, processes and behaviour to be trialled rapidly.

Researchers, partners and participants are supported to co-create potential solutions to achieve a preferable future. The resulting ideas become candidates for further research and development, allowing them to achieve their full potential.

It is a central element in the Digital Health & Care Institute (DHI), a Scottish Innovation Centre funded by the Scottish Funding Council, in partnership with Scottish Enterprise and Highlands and Islands Enterprise.

#### The Digital Health & Care Institute

The Glasgow School of Art is a founding partner in the Digital Health & Care Institute, which is a partnership between NHS 24, Scottish Enterprise and Highlands and Islands Enterprise.

The DHI Innovation Centre creates an open community where industry can collaborate effectively with academia, health, care and social partners on innovation opportunities that will create societal and economic benefits in Scotland. The DHI will co-create sustainable economic growth through new products, services and systems. These solutions will generate high value health and social care solutions to the benefit of the people of Scotland and further afield.

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### **Experience Lab Project Team**

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### **Academic Partner**

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### Acknowledgements

We would like to thank all of our participants for giving up their valuable time to take part in the Experience Labs. We are also grateful to our project partners at NHS Grampian and the University of the Highlands and Islands.

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### Project Background

Breastfeeding rates in the UK continue to be among the lowest in Europe. Despite evidence supporting that increased breastfeeding has the potential to improve the health of both mother and baby, only 26.2% of babies were exclusively breastfed for at least six weeks in 2012/13. In Scotland, breastfeeding rates are poor and static. By six weeks, breastfeeding rates have decreased substantially and are particularly worse in deprived areas [1].

The UK Department of Health and UNICEF recommend breastfeeding for a minimum of six months, continuing until beyond the first year of life. However, women's feeding decisions are influenced by a number of social, cultural, political and economic factors as well as changing attitudes and values [2]. Studies have found that teenage mothers are influenced and led to formula feed due to factors such as social norms and embarrassment of public

feeding, despite being well informed of the health benefits of breastfeeding [3].

There are important health benefits from breastfeeding for the mother and her baby. Findings of a recent report suggest that moderate increases in breastfeeding could reduce hospital admissions and GP consultations and save the NHS in excess of £40million [4].

Recognising that co-created, iterative methodologies using designers and a 'bottom up' approach have the potential to develop more person-centred service innovation, this project brought together end users and key health professionals to design interventions tailored to empower and motivate users.



### **Project Aims**

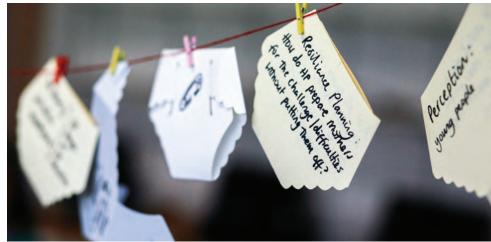
The aim of the research project was to employ a user-driven approach to develop new ways of promoting breastfeeding among new mothers and young women. Key to this aim was to identify ways in which women want to be supported: the methods, models and timescales of information sharing and support provision as well as identifying how health professionals want to provide that support in practice. The project sought to develop a model of delivery that meets the needs of all groups and has a positive impact on baby feeding decision-making.

### Mini-Lab 1

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The aim of the first Mini-Lab was to understand the current landscape of breastfeeding support and information, to explore the experiences of service providers and to consider what models of health promotion work most successfully. The first Mini-Lab involved the use of storytelling to allow participants to share their experiences in health care or academia related to baby feeding and supporting mothers. Participants were encouraged to consider practical, social and emotional themes related to breastfeeding support. Following this activity, participants then engaged in a mapping activity to consider what models of health promotion are successful and identify challenges, barriers and areas of opportunity. Finally, participants were supported to consider future ways to provide support and promote breastfeeding that were included in, or aligned but external to, the care pathway.







## Mini-Lab 2

The aim of the second Mini-Lab was to collect practical, social and emotional reasons from mothers who breastfeed to gain insight into current experiences of baby feeding decision making. In particular, the key moments in the decision-making process where information or support would be valuable and the best model of delivery for this information/ support. The second Mini-Lab involved the use of storytelling to allow participants to share their experiences of baby feeding, including their motivations and key influences on their decision. Participants were then presented with a map of the pregnancy journey highlighting where baby feeding decisions were discussed and described the support and information provided at each stage.

Participants were encouraged to reflect on each stage and provide feedback regarding their own experience. Participants were also presented with ideas for future support resulting from the Mini-Lab with health professionals and academics to gain feedback and were also encouraged to consider ways in which they would prefer to receive information and support in the future.

### Findings: Mini-Labs

Thematic analysis was applied to the transcripts from each of the Mini-Labs to code for emerging and recurrent themes. Analysis revealed that the emerging themes fell within layers of influence on mothers regarding their baby feeding decisions, similar to an ecological model comprising several levels of impact and interrelationships. A visual map of the evolving ecological model was created to demonstrate the levels of influence, impact and interrelationships.











## Ecological model of breastfeeding

At the micro-level layer of the model is the individual and their personal experiences/ influences that impact their decision to breastfeed. Themes emerging at this level linked to expectations of breastfeeding and the need for these to be realistic so that mothers can be prepared and make an informed decision regarding the method of feeding. Emotional factors were also discussed as having an influence on the decision such as having determination and motivation to maintain breastfeeding, and also the confidence and overcoming feelings of anxiety, guilt and fear all playing a role in the mother's experience. Mothers who participated discussed the influences on motivation such as the

benefits of breastfeeding in comparison with formula for the health of the baby and that it is free. The bond, attachment and latch were also identified as factors that have personal influence on the decision and experience of breastfeeding.

The layer surrounding the micro-level of the individual is the microsystem, which represents the context and social influences/environments that impact a mother's decision to breastfeed. In this layer, key influences included the social support network of the mother, which was highlighted as being 'key' to ensure initiation and maintenance of breastfeeding. Helping the mother to establish these networks pre-birth was identified

as important to support the mother in being able to breastfeed, with continuity of support playing a key role in maintenance. However, it was highlighted that there are a lack of groups that exist to support mothers and that social isolation may also have a negative impact on a mother's decision. Health professionals were discussed as a key source of support to mother's, however, the experiences were mixed. Mothers highlighted the need to have support in and out of hospital and that having the same health professional was preferred, if possible, during and after birth. Participants commented that they felt breastfeeding promotion and support by health professionals was particularly emphasised when the health

professionals had an extra interest or

Government: - Awareness - Promotion - Campaigns



training in this particular feeding. In addition, information overload on the mother was discussed as tending to focus on pregnancy rather than post-pregnancy, with information from a range of different sources and inappropriate websites. In this layer, education was identified as a way to promote breastfeeding through early intervention and the need to introduce children and young people to breastfeeding while at school.

The next layer is most akin to the exosystem, which represents the wider influences on a mother's decision to breastfeed that the mother is not directly involved in, but is influenced by. In this layer, themes emerged related to the role of the media, image of breastfeeding, stigma and assumptions. The role of the media was highlighted as a key source of influence on breastfeeding promotion and was described as often portraying negative aspects and promoting acceptance of bottlefeeding. Breastfeeding is also negatively influenced by image where breasts are sexualised and linked to body image, rather than seen as a natural way to feed a baby. In addition, breastfeeding is often portrayed as an inconvenience rather than an 'easy' way with respect to not requiring any equipment or time to prepare. Participants discussed a key challenge of the stigma of breastfeeding, particularly in relation to public feeding and noted that mother's often worry about what other people will think of them. Finally, within this layer of influence, participants also discussed the assumptions that exist around

breastfeeding being the choice that everyone wants to make and that having a second or third child means that mothers can 'manage' with very little support.

The final layer is similar to the macrosystem, which reflects the cultural and political level influences upon the individual. Themes within this layer focused on the culture of bottle-feeding which stemmed from changes in the 1970's and the impact this has had on breastfeeding no being recognised as 'normal' practice. Participants highlighted the need to change the culture through promotion and public acceptance of breastfeeding to drive a change towards breastfeeding being seen as the 'norm'

In addition, the role of government and policy in promoting awareness and campaigning for breastfeeding was described as key to impacting all levels from the individual to public and media. The government is also responsible for policy around information provided to mothers by health professionals, as well as resources given postpregnancy, and are therefore a key source of influence to ensuring positive change in culture and perceptions.

### Opportunities for promotion and support

Several opportunities were identified by participants during Mini-Lab 1 and these were evaluated by mothers in Mini-Lab 2. The opportunities identified included promoting the benefits of breastfeeding, which included information on attachment. social and emotional benefits, and expectations; incentives for breastfeeding such as vouchers and rewards; providing information through electronic postcard videos providing filtered information tailored to each stage of pregnancy; developing support networks to support mothers but also inform other family members; increasing the visibility and acceptability of breastfeeding to promotion of images, in the media and video clips; educational programmes to ensure children and young people have knowledge and awareness of breastfeeding; and ways in which to promote psychological skills in mothers to build self esteem and confidence. Additional ways in which breastfeeding could be supported experientially were identified through holding breastfeeding classes at scans, having breastfeeding in hospital and initiating more work through the early years collaborative to do things before birth.

Evaluation of the ideas by mothers led to the following feedback for each of the ideas. For 24/7 support, the mothers commented that they would rather call their own midwife and have someone on the end of the phone and in relation to support on positioning would prefer to be shown how to do this or have a video clip of someone feeding. One mother guestioned how approachable the idea of 24/7 support provided by video conferencing would be and suggested that if it was from a peer then perhaps it would be less intimidating. It was also noted that Facebook is a source of 24/7 support. Similar to 24/7

support, the idea of a digital postcard was described as fast, accessible and would be better than the DVD which is already provided. It would allow mothers to access through their phone or iPad.

The idea of breastfeeding spaces in public spaces such as shopping centres was positively received but specific feedback was given in relation to requirements. The mothers were not keen on the idea that the breastfeeding space would be out of the public eye, in a separate space or in a windowless room but felt that having a space to breastfeed would give mothers more confidence to feed in public. One mother stated that more energy needs to be devoted to making people feel comfortable feeding in public and gave the example of a local group

which meet in a café/pub and where women can feed in public. They also noted that more people need to be made aware of the law in Scotland that breastfeeding is permitted in public spaces. Other mothers commented on the practicality of feeding in cafés including that a chair with arms can be difficult. Mothers suggested that more cafés could display a sticker in the window stating that breastfeeding is welcome here and may offer a free coffee or water to breastfeeding mums.

Offering additional breastfeeding support at the 20-week scan received mixed feedback. One mother commented that support could be given by a peer supporter and that at 20 weeks this would start the conversation required around breastfeeding given that this is earlier than the infant feeding

session. Other mothers felt that the 20-week scan was too early to talk about breastfeeding and suggested that 28-32 weeks would be more suitable. In their experience, the 20-week scan is a time when mothers may still not digest the reality of having a baby but also may be too excited and eager to leave the scan to share news with family. It was suggested that images of mothers breastfeeding could be displayed in the area where mothers attend the scan and that images could also depict how to breastfeed discreetly. A peer group was also identified as a good way to share any worries but that this group may meet at another time after the scan

## Preferred breastfeeding care pathway

Mothers were asked to identify at which points on the breastfeeding care pathway could ideas be introduced and also where the care pathway could be improved in general. A key role was identified for peer supporters in relation to providing additional support at scans, in hospitals and at home. Mothers also highlighted the need to have time to digest information but have opportunities to then come back and ask questions to health professionals. Having a tour of the ward prior to giving birth was also identified as something mothers would benefit from. An annotated preferred care pathway is included in Digital Appendix A.

# Exp. Lab 1

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The aim of Experience Lab 1 was to explore perceptions of breastfeeding among young people and develop ideas for new ways of promoting breastfeeding. The Experience Lab was structured as three two-hour sessions, delivered weekly with senior pupils at Elgin Academy.

The first session involved exploring different baby feeding options to understand pupils' existing knowledge and experience of baby feeding. Pupils worked in pairs to create a persona of both a mother who breastfeeds and a mother who formula feeds, and then worked in groups to create a mind map of current perceptions of baby feeding, including existing knowledge of both breast and formula feeding. Pupils were also shown fact or fiction cards regarding baby feeding and watched the video created by mothers who participated in Mini-Lab 2 regarding their experience of breastfeeding. At the end of the session the pupils were given the opportunity to ask questions to the local NHS infant feeding advisor.

The second session aimed to understand how decisions and choices are made by young people, including influences and motivations. Pupils were asked to identify the key sources of influence and support they experience and place these on a sliding scale. Pupils were then introduced to a number of baby feeding promotional campaign materials. These

included paper-based and digital material, television advertising campaigns, WHO posters, recommended websites, information support packs given to new mothers and videos created with the aim of promoting breastfeeding. An evaluation workbook was created to support the pupils to consider several criteria including how engaging, interesting, informative, persuasive and attractive each material was. At the end of the session, pupils were asked to reflect on the range of promotional materials and consider what they found to be the most preferable option.

The final session involved a review of the data gathered during the first two sessions to support the pupils to generate an idea that promotes breastfeeding to new mothers. Pupils were supported to take their ideas forward through physical-making of a low fidelity prototype using various craft materials. The pupils worked in two groups and each group was filmed presenting their idea and prototype.

### Findings: Experience Lab 1

### Knowledge of Baby Feeding

The personas worked to gauge the level of understanding and current perceptions around baby feeding and began to explore whether stereotypes exist between breastfeeding and formula feeding mothers. Key differences were identified in the types of profession of mothers, with breastfeeding mothers assumed to be working in a health and care profession, and in the needs of the mothers, with formula feeding mothers having a need for more money. In considering the personas overall, there was a clear stereotype around mother's assuming the traditional female social role within the family, e.g. responsible for cleaning, caring and feeding the baby.

Breastfeeding was perceived to have health benefits for mother and baby and to provide nutrients required for baby's needs. Young people perceived breastfeeding as a way to support the bond between mother and baby. However, there was a significant perception around the stigma surrounding breastfeeding, particularly in relation to public feeding, e.g. frowned upon and a perception that mothers normally have to breastfeed in a toilet. Breastfeeding mothers were perceived to 'look down' on formula feeding mothers, with formula seen as 'chemicals' in a bottle' and therefore not best for the baby. Young people perceived breastfeeding to be cheaper than formula and more accessible as it does not require preparation. They acknowledged that although it was a personal choice to breastfeed, some people find it difficult and uncomfortable. Similarly, it was also acknowledged that breastfeeding can be difficult when a mother goes back to work and that they may then turn to formula feeding.

Sources of support for breastfeeding were perceived to be midwives, other mothers who breastfeed, and online. With regards to education, there was a perception that young people should be exposed to breastfeeding at school and also that mothers-to-be should be encouraged to breastfeed during the early stages of pregnancy. There was also a perception that older mothers may be more likely to breastfeed as they have received more education on the topic.

In exploring knowledge and understanding around formula feeding, young people perceived it to be convenient and a way to save time. It was viewed as a way for mothers to return to work more easily and also provided a way for fathers to share the responsibility of feeding and develop a bond with the baby. However, formula feeding was perceived to be more expensive and required a lot of equipment. In terms of public acceptance, there was a contradiction in perception between an overall negative stigma around bottle-feeding and the perceived acceptance of bottle-feeding in public. Young people were aware that formula feeding advertising was more prominent and identified that the adverts tended to focus on promoting formula in a positive light. Linked to that there was a perception that formula milk was more natural and that a combination of improvement over the years and the tailoring of milk to age groups suggested it was superior to breastfeeding. Formula was perceived to replace nutrients in instances of unhealthy behaviours of

mothers. Some contradictory perceptions centred around formula being unsafe, the lack of awareness of the ingredients contained, the conditions in which it is made and potential allergies which may be triggered. Finally, young people acknowledged that some mothers may not be able to breastfeed.

The findings suggest a lack of awareness among young people of baby feeding in general but a keen interest to be educated, highlighted through the number of questions posed during the session. These included modifications to formula when a baby is unwell, how nutrients are maintained when mother is lacking, options for returning to work, and freezing breast milk.

### Sources of influence

Key sources of perceived influence identified by young people were friends, family, social media, celebrities, and TV shows. The findings suggest that young people are more likely to be influenced by their peers, with an additional emphasis on the role of social media and online engagement.

### Evaluation of existing promotional materials

Existing promotional material was evaluated by six young people, working in pairs, during the second session. An average score was given for each promotion based on the criteria of being engaging, interesting, informative, persuasive and attractive, reported in Digital Appendix B. The key findings from this activity suggest that posters scored most highly on the majority of categories. Comments from the young people indicated that the posters were not only targeted at mothers but to multiple audiences, highlighting the different ways they can provide support. The young people also commented that the posters were easy to read and informative. The website scored highly on being informative, by providing helpful key information and presenting a place where people can share experiences and gain support from others. However, young people commented that the website could be more persuasive and inviting, specifically with less text.

A number of key themes emerged across the sessions that focused on public attitudes towards breastfeeding, the lack of awareness and acceptance of breastfeeding in public, and the need to promote breastfeeding through personal and social education in schools. The young people were given the option to select an idea from either of these themes to explore, prototype and iterate during the final Lab session. The young people chose to focus on developing an idea that would promote and raise awareness of breastfeeding among the general public.

"Being based in schools I would really love a core programme where we deliver health and wellbeing and look at breastfeeding and take that in as part of their sex education and you just normalise it at a very, very early age"

- Lab Participant



## Idea 1:

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## Branded promotional materials

The key message identified by the young people was raising awareness of breastfeeding and making breastfeeding more publicly acceptable. The idea developed proposed a range of branded and marketing opportunities including a coffee cup holder, cupcakes and bags that aimed to share a promotional message: 'Breastfeeding - be 100% natural'. The idea targeted younger people and new mothers and would involve partnering with existing business such as Starbucks and Tesco. There was a strong underlying value that everyone should be made aware of breastfeeding and by communicating their promotional message in this way, public awareness and acceptance could be increased.











### Idea 2:

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### 'Breastival' public event

The young people identified that they wished to stop the stigma around breastfeeding and proposed to do this by communicating through a public event. The idea involved designing a community festival with a breastfeeding theme. The festival would provide the public with information on breastfeeding, working towards making breastfeeding more socially acceptable. The strong underlying value for breastfeeding to be socially accepted was supported by a need to inform the wider community to support mothers. The young people proposed that this would lead to breastfeeding mothers feeling more confident. To this end, the target audience included everyone: mothers, fathers, children and the wider community. The promotional event would involve partnership with NHS, breastfeeding support groups and wider community groups to make it a more accessible family-oriented day. Furthermore, the young people proposed to produce accompanying promotional posters which worked to both inform the public of the event but also included a simple and powerful statement, 'Why would you not use them [breasts] for what they are made for?' to provoke conversation.

## Public Engagement:

### Pop-up Milk Bar

As the resulting ideas presented by the young people in Experience Lab 1 were largely centred on tackling public perceptions of breastfeeding, the Lab team and project partners discussed options to test the ideas more broadly. In the first instance, the Lab team shared the ideas with local businesses in Moray to gain feedback on the proposal and to ask whether businesses would be interested in becoming involved in the project.

Discussions with one business development agency led to the opportunity to trial the breastfeeding public event at a local food and drink festival and share the branded promotional materials idea to gain feedback from members of the public. The Lab team designed a 'Milk bar' stall, which enabled popup engagement with members of the public attending the food and drink festival. The stall was themed around a milk bar offering samples of milk, promotional materials on the breastfeeding promotion project, and the opportunity to leave feedback on the ideas on display generated from Experience Lab 1. Pupils who designed the ideas were invited to take part in the event and help at the stall.

The event was a huge success and the Lab team engaged with

more than 190 members of the public. The level of engagement varied: some members of the public stopped at the stall had a look and took some of the promotional materials; some asked the researchers more questions about the project and left feedback on the ideas, and finally, more than 30 members of the public stopped to tell us about their personal experience of breastfeeding or that of a close friend or relative.

The feedback gathered focused around four main areas: increasing public awareness and acceptance; improving education opportunities around breastfeeding; positive feedback on the young people's ideas and other suggestions for promoting breastfeeding including: dedicated comfy areas for breastfeeding mums and local cafe sponsored 'tea for two' offers.





### Exp. Lab 2

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The aim of Experience Lab 2 was to share the insights gathered in previous Labs and to explore opportunities for developing and delivering a model that better meets the needs of women and care providers. Participants who took part in Mini-Lab 1 and Mini-Lab 2 were invited to take part in the final Experience Lab. Findings from the Mini-Labs, Experience Lab 1 and pop-up public engagement were presented to participants together with the video presentations of the pupil ideas from Experience Lab 1. Participants were asked to reflect and discuss the findings and ideas. The main activity of Experience Lab 2 was to iterate and refine the emerging ideas for breastfeeding promotion and support to develop an action plan/brief to enable the ideas to be taken forward by an identified appropriate team. Participants individually provided feedback on each idea and then selected two ideas to focus on, working in two groups. Each group was given a template that provided guidance on iterating and developing the idea.

### Findings: Experience Lab 2

Feedback on the ideas and the interim findings of the project was positive, with participants commenting that they felt heartened by the responses of the young people and refreshed by the novel approach taken. Participants acknowledged that there is a local commitment among businesses to support breastfeeding mothers and that development of this relationship could encourage and promote breastfeeding to a wider audience, as well as gaining local knowledge.

Over the course of the Lab there was a shift in focus towards setting realistic expectations about breastfeeding and ensuring mothers have the resources they need to make an informed choice. Alongside this, there was also a recognition that women may feel pressured to breastfeed through being 'bombarded' with information and therefore the consideration of how the message is crafted and presented is important. It was recognised that communication to specific audiences, such as the wider family and networks of women, would be of benefit to give support in decision-making. One participant shared their experience of gaining support from an experience mother and the impact this had on the continuation of breastfeeding. However, it was acknowledged that generational support is lacking given the shift to formula feeding in the 1970s.

The role of the health professional in providing support to enable informed decision-making was discussed, in particular the ability of the health professional to provide balanced support when the focus is on promoting breastfeeding. Existing materials and information packs can be used by health professionals as tools to support them to provide the best and most appropriate advice to families, however this requires the health professional to be able to judge the needs of parents. There was recognition of the need to tackle the wider challenges around acceptance and support, e.g. mass media and government policies, lending further support to the ecological overview provided in the findings of Mini-Labs 1 and 2.

Finally, there was a discussion around informal online support through social media and the negative impacts this can have on mothers. It was highlighted that Facebook, although sometimes can help people to feel better, can have have a negative impact through the tendency for people to present the positive side to their life rather than admit to difficulties. In relation to breastfeeding, this can worry mothers and demotivate them to continue when viewing posts from others portraying how 'easy' and positive their experience of motherhood is. On closed groups participants noted there is a different experience where people are more likely to present the reality of situations and within this group people feel that they will not be judged as everyone has similar experiences and can provide reassurance to each other.

Six ideas centred on breastfeeding promotion and support were presented on an ideation template which included sections for participants to brainstorm, sort/add and develop. The ideas were:

- What educational programme might support breastfeeding?
- What could be done to support the psychological skills development?
- What would a breastfeeding class at the 28/32 week scan look like?
- What incentives might support breastfeeding?
- How could we improve the booking stage?
- What might be included in on a digital postcard sent out to support breastfeeding?

Feedback from participants on each of the ideas is included in Digital Appendix C. Using the method of dotocracy, participants selected the two most effective ideas from the suggestions presented in the brainstorming section of each template. Participants identified two ideas for further development after reflecting on the ideas that were most preferred by the group. Remaining ideas are provided in more detail in Digital Appendix D.

### Idea 1: How could we improve the booking stage?

Discussion on how the booking stage could be improved led to the group choosing to focus on redesigning the website 'Baby Feeding Matters' in order to provide a single point of information/support and reduce the amount of paperbased information given to new mothers. Participants discussed the number of leaflets that are given to new mothers at various stages across the patient journey, however there







was some debate around the way that this could be done digitally. There is an opportunity during the booking stage for the health professional to share their own personal experience of feeding with the mother if appropriate, relating to a desire for real life experiences. It was acknowledged that the responsibility of the health professional is to provide the mother with all the information contained in the various leaflets and the physical act of handing over the information safeguards the professional. However, one participant commented that they felt that information received in this form was a waste and that most people would prefer to access the information online.

In considering the redesign of the website, key priorities were uncovered throughout the discussion relating to content, user and technical requirements, sharing, and access.

### Content

Discussion on content highlighted the need to organise the information into different tabs/sections tailored to breastfeeding (including information on expressing) and formula feeding. The idea was that the website would provide information to everyone in order to promote an informed choice around feeding and ensure that the wider social circle of the mother is also informed. The information may take the format of brief chapters with the main page providing the links to different pages. Participants discussed the need to include a section on 'breast vs. bottle' or 'what's right for me' to help people make their choice but including information on what is required for breast and bottle-feeding, highlighting the associated costs, facts, equipment required and processes.

In relation to the generation of content, participants discussed the need to involve those who the information is targeted to, in the development of the content of that particular section e.g. the section for young people would have input from young people themselves. In this way content would be contributed by health professionals, parents, families, etc., but would receive overall accreditation from the NHS. Content would also be produced from real-life experiences of parents and families to provide quotes and stories, e.g. 'I never thought I'd get past the first few days.' Participants felt that this could also be a way to involve mothers who wish to provide peer support but are unable to take on the formal role of a peer supporter, through forming a virtual peer support and providing reassurance to those who are new to the experience.

### Requirements

Discussion highlighted a number of key requirements for the

website including: ease of use/ user-friendly, vibrancy and colourful, engaging graphics and imagery, and the need to keep the language simple. The website needs to be easy to understand and not too technical, providing a synopsis and then suggesting further information with links. In this way the information is condensed into manageable chunks. The ability to translate the webpage into a different language would be beneficial and there was discussion around who would be responsible for ensuring translations. The website would also provide links to videos and it was acknowledged that all information would be evidencebased and therefore require regular updating.

#### **Sharing and Access**

Discussion on sharing and access to the website focused on promotion, access and the way in which information could be shared through the site. Participants felt the website should be advertised more, particularly through sharing on social media. Participants also discussed the need to ensure the website is returned on Google searches and highlighted the importance of search terms and the name of the website. It was noted that the website may not be accessible to all groups, particularly those living in rural areas where poor internet access makes if difficult to

download information. The option to provide access to the website information on a memory stick was discussed, however keeping the memory stick up-to-date was seen as problematic.

Participants discussed the option to include a forum on the website where mothers could post a question and receive a response from a health professional. At the moment there is an umbrella NHS Grampian Facebook page and a BRAG (Breastfeeding **Reassurance and Awareness** Group) Facebook page. However one participant cautioned the use of Facebook as a forum because of negative postings and interpretation of responses. The current website contains a link to the NHS Grampian Facebook page. Participants discussed that the website could provide a space for people to post questions and receive an automatic reply that the post would be responded to in either 24 or 72 hours. A moderator (who would have to be a health professional) would receive a notification to alert them that a post has been received. The posting space would be moderated on a rota basis with the health professional on duty required to reply to messages that are received during their shift. Participants discussed the opportunity for peer supporters to play a role

in the forum by providing real life experience and supporting this with the training they receive. The opportunity for experienced mothers to attend antenatal classes to share their experience was also discussed. and the option for them to contribute to the forum through replying to posts that were appropriate. Participants noted that a disclaimer on the website would be necessary to state that the website and forum is for 'information only' and that some users of the website may need to be directed to seek medical advice. It was highlighted that the website could also provide a gateway to provide one-toone support by linking to the VC system, however there is a need to overcome NHS security to enable this.

Partners and collaborators to the website would involve Baby Feeding Finder. Participants also discussed incentives to support breastfeeding and as a way to promote the website, including branded bags/badges. However caution was given around ensuring breastfeeding does not become 'exclusive', with one participant sharing an experience that being part of breastfeeding groups can make others who were unsuccessful with breastfeeding feel guilty. The promotion of the website and breastfeeding needs to make sure everyone has support.

### Idea 2: What might be included in on a digital postcard sent out to support breastfeeding?

While this was initially considered as a potential area for development, ideation around the theme extended the scope to beyond what was initially anticipated. Brainstorming ideas centred around the desire to share real life stories supported with evidence, the role of digital networks in providing support to new mothers, and practical advice. This was refined to focus on accessible video-based information shared via short stories that are both informative and authentic, balancing truth and reality. An example given was a two-minute video shared through Facebook or YouTube.

### Content

The core element of the idea was around the importance of sharing of multiple voices: health professionals, peer supporters, mothers (younger, older, multiple children, those who have breastfed), and other support services. Participants proposed a portfolio of local videos, also known as a videolog (vlog). The format proposed for the vlog was similar to the style of a 'Ted talk'. The vlogs would aim to provide credible information, advice and support, as well as acting as a hook to engage new mothers with additional or external support groups. There is also

a potential link to feed into the breastfeeding module and existing social network groups. Emerging themes for possible videos included: thinking about parenthood, antenatal, wellbeing and support. A question posed by participants was 'how do we become information curators, who are essential responsible for the curation and dissemination of information?'

### Accreditation

These videos would have NHS approval/accreditation but have the potential to be uploaded by other sources. The open source model takes into account the potential voices of health professionals (health visitors, communities midwives etc.) as well as users themselves who can post their own vlogs. This would ensure regular input and refreshing of videos keeping it relevant and this was deemed to be important to the participants involved. Quality emerged as an important consideration with regards to quality of information, and governance.

### Access and sharing

In terms of access it was proposed that the library of vlogs could run on a link in the day room, and would tie in with existing information delivered digitally. The potential audience are mums, mums-to-be, wider family, people experiencing a problem or challenge, hard to reach groups and those who find it harder to integrate into physical settings. It is anticipated that the users will be media-savvy and able to access through their mobile phone. The model could be tailored to age and stage of pregnancy.

A pilot vlog-sharing project on Facebook could generate the idea of vlogs and provide evidence to develop a standalone site. The pilot could also provide a space for frequently asked questions, e.g. how do I know my baby is getting enough, how do I know I'm doing it right, and also include an option for people to email questions to a health professional, with responses on a monthly basis. People would sign up to a maternity Facebook page where videos are posted periodically: similarly they could enter their due date to provided with relevant information for their stage of pregnancy. Users could contribute their own videos to their Facebook page, however these need to be approved by NHS prior to publishing.

Some of the challenges around this idea centred on NHS IT access, ownership of content and challenges with corporate communications within the NHS model and if users were submitting videos the potential risk for the NHS to be linked with information that is not credible or meets national recommendations. Another challenge that was identified by participants was in the recruitment and incentive for people to produce and share their own content.

The idea would be funded by public funds or local business, or alternatively through online advertising.

## Future recommendations

Beyond the findings of the project, a number of recommendations were identified for further development and research activity.

#### Exploring the care pathway

Consideration of the existing care pathway highlighted variations between both the services offered by different health care providers and the geographic inconsistencies between how and when services are delivered. Further research is encouraged to fully articulate the key touch-points (key moments of interaction with the service on the ante/post-natal journey) on the care pathway to manage the expectations of both health professionals delivering and women accessing the services. There are opportunities to explore this in a visual way to further enhance accessibility. Similarly, there are also opportunities to explore the relation between the care pathway offered in Moray and the wider maternal health context.

### A single maternity service voice

As identified throughout this project, there is a demand for the service to a deliver consistent and coherent message. The creation of a single maternity service voice would enable this, ensuring that information distributed by health professionals does not differ across region and that equal access to quality care is enabled. Linked to this, the continued professional development of staff is recognised as a way of increasing awareness of the care pathway, e.g. timescales for antenatal classes. This could work towards the avoidance of inconsistencies in service delivery, manage expectations and work towards a stronger Moray maternity presence.

### Schools educational programme

In addition to an enhanced learning experience for staff, the creation of an educational programme and materials for delivery in schools was identified as a potential area for development. The materials created throughout this project could be used as a starting point for this activity, however it is recommended that materials are co-designed with teachers and are age appropriate. Pupils who participated in the project commented on the value of the Labs and expressed an interest in extending learning

opportunities beyond existing personal and social education to take into account a longitudinal perspective of health.

#### **Community collaboration**

The ideas emerging from the project can be further iterated and tested in collaboration with young people from local schools across Moray. In building this collaborative relationship, the young people become invested in the ideas with the potential to create a more sustained engagement and impactful conversation around breastfeeding.

The findings of the project support the rebranding and relaunch of the breastfeeding friendly initiative in collaboration with local businesses. In realising this idea, further research is required to identify the opportunities for wider engagement with businesses, e.g. to explore sponsorship options, staff training and guideline development. Design expertise will be required in relation to the way in which the initiative is relaunched and rebranded.

### Website requirements and testing

Development of the website and online support framework as described by participants requires further identification of specific user requirements, in addition to those identified in this project, to fully test, verify and evaluate their suitability in context. This would involve user experience and usability testing with appropriate groups, e.g. mothers (new and experienced), wider family members, health professionals, young people and wider NHS, using fully refined prototypes and is recommended before trialling and piloting the website more widely. I quite like to get advice from other mums as professionals so it's like real-life experiences, even if those professionals have fed themselves, it's nice to have some mums that are going through it at that particular point"

- Lab Participant



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