



## Breastfeeding and parent-baby attachment for babies in neonatal units and their families

### A consultation exercise

The Scottish Improvement Science Collaborating Centre (SISCC) is planning to work in collaboration with neonatal units to design and implement a series of improvement projects across Scotland in order to improve rates of breastfeeding and to facilitate interaction and parent-baby attachment between babies and their families. We know that all neonatal units in Scotland are working towards the Unicef UK Baby Friendly neonatal standards, and note that our planned work synergises well with these standards. We hope that the results of this consultation will help both to inform development of this SISCC project and also support services to achieve and maintain Unicef UK Baby Friendly Initiative accreditation.

We have studied research literature, policy and guidance documents to identify a set of evidence based actions that increase breastfeeding and parent-baby attachment for clinically stable pre-term infants and their families.

Before implementing any of these actions in neonatal units, it is important to identify whether these actions are feasible and acceptable to practitioners who work in neonatal units and people who plan and manage services. This work will also seek to consult with mothers and families at a future date in order to ensure their valuable insights are incorporated.

**We are inviting health care workers and health care professionals, managers, practice developers, educators and service user representatives who have knowledge and experience of neonatal care to take part in this stage of the consultation exercise.**

We would like to invite you to complete this questionnaire to get your views on which actions are likely to have the greatest impact and are most feasible to implement in practice.

Your opinions, experiences and expertise are very valuable to us in planning the next stages of our work.

Our work in this area has the support of NHS Health Scotland, Unicef UK Baby Friendly Initiative, Maternity and Children Quality Improvement Collaborative (MCQIC) and Bliss as well as an advisory group consisting of key stakeholders from other government, health and social care organisations.

**Thank you for taking the time to help us.**

## Completing the Electronic Questionnaire

To complete the questionnaire please read through the evidence based actions we have identified and score each action based on how much **impact** it could have and how **feasible** it would be to implement in practice.

We have divided the evidence based actions into four categories:

- effective actions supported by high quality evidence
- promising actions supported by moderate quality evidence
- promising actions where there is a weak evidence base
- actions that are likely to be ineffective

In the final sections of the questionnaire, there is space for you to tell us about any other approaches that you have found helpful in promoting breastfeeding and parent-baby attachment.

**Any information you give will be treated in strict confidence. No information that could identify you or your place of work will be published.**

To complete the questionnaire -

Select a number from the drop down box. If you decide to change any of your scores once you have read through the complete list, you may do so by returning to the question and changing your answer.

At the end of each page, please press NEXT.

At the end of each page, the BACK button can be used to go back to the previous page.

At the end of the questionnaire, please press SUBMIT.



## Question 1 Actions likely to be effective

The following actions have been derived from **high quality evidence** and there is strong evidence that they are **likely to be effective**

### Your recommendations

**Impact** how likely is this action to have a positive impact in the settings with which you are familiar?

**Most impact if implemented**      5 >> 4 >> 3 >> 2 >> 1      **Least impact**

**Feasibility** - how practical would it be to implement this action?

**Most feasible to implement**      5 >> 4 >> 3 >> 2 >> 1      **Least feasible**

**Current Practice** - If you currently spend any time working in a neonatal unit, please select the description from the drop down menu that best described the status of the action at the moment i.e. you are doing it already, working towards it, not doing it, or you don't know.

1. Daily <b>kangaroo skin-to-skin contact with mothers</b> (ranging from 10 mins up to 2 hours) for clinically stable very low birthweight infants (under 1,500g) increases the duration of <b>any breastfeeding</b> at discharge and up to one month after <sup>(1)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
2. Any intermittent <b>kangaroo skin-to-skin contact with mothers</b> (of variable duration and frequency) is associated with an increase in <b>any breastfeeding</b> from discharge from NICU until 1-2 months follow up in stabilised infants born under 2,500g <sup>(2)</sup>	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
3. Any duration of daily <b>kangaroo skin-to-skin contact with mothers</b> that promotes mother-infant interaction and touch results in mothers showing <b>better adaptation to infant cues, better perception of their infant, less anxiety, a greater sense of competence with their infant and more sensitivity towards the infant</b> <sup>(2,4)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
4. Intermittent <b>kangaroo skin-to-skin contact with mothers</b> is associated with an increase in <b>mother-infant parent-baby attachment</b> at 3 months follow up <sup>(2)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
5. <b>Baby Friendly accreditation</b> of the associated maternity hospital results in improvements in several <b>breastfeeding</b> -related outcomes for infants in neonatal units <sup>(5)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>



## Question 2 Promising actions

The following actions have been shown to be **promising** but the **evidence base is of moderate quality**.

### Your recommendations

**Impact** how likely is this action to have a positive impact in practice?

**Most impact if implemented**      5 >> 4 >> 3 >> 2 >> 1      **Least impact**

**Feasibility** - how practical would it be to implement this action?

**Most feasible to implement**      5 >> 4 >> 3 >> 2 >> 1      **Least feasible**

**Current Practice** - If you currently spend any time working in a neonatal unit, please select the description from the drop down menu that best described the status of the action at the moment i.e. you are doing it already, working towards it, not doing it, or you don't know.

1. Making <b>donor human milk</b> available in neonatal units has no negative impact on <b>breastfeeding</b> rates at discharge <sup>(6)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
2. Making <b>donor human milk</b> available in neonatal units <b>decreases formula use</b> during the first four weeks of life <sup>(6)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
3. <b>Breastfeeding support</b> increases <b>breastfeeding</b> rates and duration when parents are given a combination of the following messages: accurate information about the contribution of breast milk to the infants growth and well-being; opportunities for physical contact with the infant; accurate information regarding breast milk supply and breastfeeding techniques; and information about general infant behaviour <sup>(3,7)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
4. An individualised <b>discharge plan</b> for breastfeeding mothers with follow-up telephone calls maintains mothers confidence in <b>breastfeeding</b> and provides reassurance <sup>(4)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
5. Positive, consistent and continuous feedback and reinforcement stimulates mothers motivation, and educational programmes provided in the context of <b>ongoing personal contact</b> with a health professional are effective in promoting the initiation and prevalence of <b>breastfeeding</b> <sup>(1,3)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
6. <b>Staff training and education</b> on breastfeeding delivered to a multi-professional workforce improves staff knowledge and generates increased use of expressed breast milk, and initiation and duration of <b>breastfeeding</b> in neonatal units <sup>(1)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>

### Question 3 Potentially promising actions

The following actions have been shown **some promise** but the **evidence is limited or weaker quality**.

#### Your recommendations

**Impact** how likely is this action to have a positive impact in practice?

**Most impact if implemented**      5 >> 4 >> 3 >> 2 >> 1      **Least impact**

**Feasibility** - how practical would it be to implement this action?

**Most feasible to implement**      5 >> 4 >> 3 >> 2 >> 1      **Least feasible**

**Current Practice** - If you currently spend any time working in a neonatal unit, please select the description from the drop down menu that best described the status of the action at the moment i.e. you are doing it already, working towards it, not doing it, or you don't know.

1. <b>Techniques</b> (relaxation, warmth, massage, early initiation of pumping and increased frequency of pumping) significantly increase the <b>quantity of milk</b> obtained <sup>(8)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
2. <b>Improving the neonatal unit environment</b> (privacy, increased contact with infants, less emphasis on feeding routines) and staff support for parents (information, education and positive, consistent reinforcement and feedback) may <b>enhance milk expression and supply</b> during hospitalisation in the <b>neonatal unit</b> <sup>(3)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
3. Parents receiving <b>breastfeeding support</b> at the neonatal unit in the form of counselling, information (handouts and videos), practical help and group breastfeeding clinics are more likely to continue <b>breastfeeding</b> up to a month after discharge <sup>(4)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
4. Chat or <b>social talk</b> between nurses and parents has a positive influence on mothers confidence, their sense of control and their feeling of connection ( <b>parent-baby attachment</b> ) with their baby <sup>(4)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
5. <b>Giving parents a photograph</b> of their preterm infant in preparation for seeing the infant for the first time has a positive effect on improving <b>parent-baby attachment</b> with their infant <sup>(4)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>
6. Interventions are likely to be less effective if implemented individually, instead interventions to support <b>breastfeeding</b> should be <b>multi-faceted</b> and should span both the antenatal and postnatal period <sup>(1)</sup> .	<b>Impact</b>	<input type="text"/>
	<b>Feasibility</b>	<input type="text"/>
	<b>Current</b>	<input type="text"/>



## Question 4 Actions likely to be ineffective

The following actions have shown potential to be **ineffective** but the evidence is of limited or weaker quality.



What impact would this have if these practices were to be abandoned?

1. Supplementing breast feeds with <b>cup feeding</b> (as opposed to bottle feeding) during establishment of breastfeeding for preterm infants is unlikely to have any effect on <b>exclusive breastfeeding</b> beyond discharge and increases length of hospital stay considerably <sup>(9)</sup> . (This evidence did not include studies comparing the use of tube feeding)	<input type="text"/>
2. <b>Early discharge</b> from the <b>neonatal unit</b> , with home support is unlikely to have a positive effect on duration rates of <b>any and exclusive breastfeeding</b> among clinically stable preterm infants <sup>(5)</sup> .	<input type="text"/>
3. <b>Weighing the infant</b> before and after feeds leads to no significant difference in the mothers confidence and competence in carrying out <b>breastfeeding</b> <sup>(4)</sup>	<input type="text"/>

## Question 5 Your Suggested Actions

a) Please give examples of **other** actions that you think might be effective in promoting breastfeeding in neonatal units.

b) Please give examples of other actions that you think might be effective in promoting breastfeeding in neonatal units, **especially for mothers and babies from vulnerable groups, such as teenagers, women who do not speak English, and women with complex social problems.**



## Question 6 Your Suggested Actions

a) Please give examples of **other** actions that you think might be effective in promoting parent-baby attachment in neonatal units.

b) Please give examples of other actions that you think might be effective in promoting parent-baby attachment in neonatal units, **especially for mothers and babies from vulnerable groups, such as teenagers, women who do not speak English, and women with complex social problems.**



## Question 7 Your views on barriers to change

a) What are the key barriers to promoting change and achieving the cultural shift necessary to promote breastfeeding and maternal-infant parent-baby attachment in neonatal units?

b) What actions are likely to work to overcome these barriers?

c) Do you have any examples of best practice that would support the actions suggested in this questionnaire?



## Question 8 Future work

Please tell us what you think future priorities should be for our future work in the field of maternal and infant health.

## Question 9 - Is there anything else you would like to tell us?

a) About the topic in general?

b) About this questionnaire?

c) About any related work or projects ongoing in your area e.g. Baby Friendly Initiative Neonatal Standards, Maternal and Children Quality Improvement Collaborative (MCQIC) etc.



## Question 10 Please tell us about yourself

a) What type of organisation do you work for?

Other:

b) Which category best describes your current role?

Other:

c) Where are you based? Please state your geographical location.

d) Which regional neonatal network do you belong to?

Other:

e) What Neonatal Unit do you work in?



## Question 11 Would you like to take part in future consultation activity?

We are planning a series of face-to-face stakeholder workshops to discuss the findings from the questionnaire and identify opportunities for implementing some of the strategies in neonatal units across Scotland. We will hold one workshop in each of the Scottish neonatal network areas (South East and Tayside, North of Scotland, West of Scotland). We want to invite frontline staff, practice developers, strategic and operational managers, user representative groups, policy makers, practice educators and others. If you are interested in finding out more about taking part in these workshops, please leave us your email address below and we will send you more information.:

Email:

Your answer to this question will be removed from the analysis of the rest of your questionnaire responses, to maintain anonymity of your answers.

Thank you very much for taking the time to help us.

  

## References

1. Renfrew MJ, Dyson L, McCormick F, Misso K, Stenhouse ESE, King SE and Williams AF (2009) Breastfeeding promotion for infants in neonatal units: a systematic review. *Child Care Health and Development*, 36(2). pp165 - 178
2. Conde-Agudelo A, Díaz-Rossello JL (2014) Kangaroo mother care to reduce morbidity and mortality in low birthweight infants. *Cochrane Database of Systematic Reviews* Issue 4.
3. Alves E, Rodrigues C, Fraga S, Barros H, Silva S (2013) Parents views on factors that help or hinder breast milk supply in neonatal care units: Systematic review. *Archives of Disease in Childhood Fetal and Neonatal Edition*, 98 (6). F511 - F517
4. Brett J, Staniszewska S, Newburn M, et al. (2011) A systematic mapping review of effective interventions for communicating with, supporting and providing information to parents of preterm infants. *BMJ Open*, 1. pp1 - 11
5. Renfrew MJ, Craig D, Dyson L, McCormick F, Rice S, King SE, Misso K, Stenhouse E and Williams AF (2009) Breastfeeding promotion for infants in neonatal units: a systematic review and economic analysis. *Health Technology Assessment*, 13(40).
6. Arslangolu S, Corpeleijn W, Moro G, Braeffler C et al. (2013) Donor Human Milk for preterm infants: current evidence and research directions *Journal of Pediatric Gastroenterology and Nutrition* 57(4). 535-542.  
DOI:10.1097/MPG.0b013e3182a3af0a
7. Breire C, McGrath J, Cong X, Cusson R (2014) An integrative review of factors that influence breastfeeding duration for premature infants after NICU hospitalisation. *Journal of Obstetric, Gynaecological and Neonatal Nursing* 43(3). 272-281;  
DOI: 10.1111/1552-6909.12297
8. Becker GE, Smith HA, Cooney F (2015) Methods of milk expression for lactating women. *Cochrane Database of Systematic Reviews* Issue 2
9. Collins CT, Makrides M, Gillis J, McPhee AJ (2008) Avoidance of bottles during the establishment of breast feeds in preterm infants. *Cochrane Database of Systematic Reviews* Issue 4.



Thank you for taking the time to help us in this important work