

Postnatal care

[K] Information for lactation suppression

NICE guideline NG194

Evidence review underpinning recommendation 1.5.21

April 2021

Final

*These evidence reviews were developed by the
National Guideline Alliance, part of the Royal
College of Obstetricians and Gynaecologists*

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Local commissioners and/or providers have a responsibility to enable the guideline to be applied when individual health professionals and their patients or service users wish to use it. They should do so in the context of local and national priorities for funding and developing services, and in light of their duties to have due regard to the need to eliminate unlawful discrimination, to advance equality of opportunity and to reduce health inequalities. Nothing in this guideline should be interpreted in a way that would be inconsistent with compliance with those duties.

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Information for lactation suppression

Review question

This evidence report contains information on 2 review questions relating to lactation suppression:

- What information, and support should be given to women about lactation suppression?
- And under what circumstances should the information be provided?

Introduction

Some women are unable or choose not to breastfeed. It was considered important to explore what is known about the advice that could help women and enable them to avoid the experience and potential complications of unwelcome lactation. The aim of this review is to explore what information and support should be given to women about lactation suppression and under what circumstances this information should be provided.

Summary of the protocol

See Table 1 for a summary of the Population, (Phenomenon of) Interest and Context characteristics of review.

Table 1: Summary of the protocol (PICO table)

Population	Women who have given birth including twins or triplets. Women who have experienced a still birth or neonatal death.
Phenomenon of interest	<p>Views and experiences of the information about lactation suppression in the first eight weeks after a singleton or multiple birth.</p> <p>Themes will be identified from the available literature. The committee identified the following potential themes (however, they are aware that not all of these themes may be found in the literature and that additional themes may be identified):</p> <ul style="list-style-type: none">• timing of the provision of information and support• woman's preferences in relation to receiving specific information privately or together with partner• level of detail in relation to potential circumstances in which lactation suppression may be appropriate• content of information including opportunities for breast milk donation (Milk banking)• nature of support• consistency of information and support• healthcare professional delivering the information and support• communication skills of the person providing the information and support• setting in which information and support is delivered
Context	Studies from the UK only.

For further details see the review protocol in appendix A.

Methods and process

This evidence review was developed using the methods and process described in [Developing NICE guidelines: the manual 2014](#). Methods specific to this review question are described in the review protocol in appendix A.

Declarations of interest were recorded according to NICE's 2014 conflicts of interest policy until March 2018. From April 2018 until June 2019, declarations of interest were recorded according to NICE's 2018 conflicts of interest policy. From July 2019 onwards, the declarations of interest were recorded according to NICE's 2019 [conflicts of interest policy](#). Those interests declared before July 2019 were reclassified according to NICE's 2019 conflicts of interest policy (see Register of Interests).

Clinical evidence

Included studies

A systematic review of the literature was conducted but no studies were identified which were applicable to these review questions.

See the literature search strategy in appendix B and study selection flow chart in appendix C.

Excluded studies

No studies were identified which were applicable to these review questions.

Summary of studies included in the evidence review

No studies were identified which were applicable to these review questions (and so there are no evidence tables in appendix D). No meta-analysis was undertaken for this review (and so there are no forest plots in appendix E).

Quality assessment of studies included in the evidence review

No studies were identified which were applicable to these review questions and so there are no evidence profiles in appendix F.

Economic evidence

Included studies

A single economic search was undertaken for all topics included in the scope of this guideline but no economic studies were identified which were applicable to these review questions. See the literature search strategy in appendix B and economic study selection flow chart in appendix G.

Excluded studies

No economic studies were reviewed at full text and excluded from these review questions.

Economic model

No economic modelling was conducted for these review questions because the committee agreed that other topics were higher priorities for economic evaluation.

Evidence statements

Clinical evidence statements

No evidence was identified which was applicable to these review questions.

Economic evidence statements

No economic evidence was identified which was applicable to these review questions.

The committee's discussion of the evidence

Interpreting the evidence

The outcomes that matter most

This review focused on what information, and support should be given to women about lactation suppression and also under what circumstances should the information be provided. To address this issue the review was designed to include qualitative data and as a result the committee could not specify in advance the data that would be located. Instead they identified the following main themes to guide the review although the list was not exhaustive and the committee were aware that additional themes may be identified.

Suggested themes for information and support about lactation suppression included:

- timing of the provision of information and support
- woman's preferences in relation to receiving specific information privately or together with partner
- level of detail in relation to potential circumstances in which lactation suppression may be appropriate
- content of information including opportunities for breast milk donation (Milk banking)
- nature of support
- consistency of information and support
- healthcare professional delivering the information and support
- communication skills of the person providing the information and support
- setting in which information and support is delivered

From the studies identified from the searches, none were selected as relevant from reviewing their title and abstracts. Typically, studies were excluded as they were not qualitative, not based in the UK or not about lactation suppression.

The quality of the evidence

No studies were identified which were applicable to these review questions.

Benefits and harms

Despite the lack of evidence, the committee felt this was an important topic that should be discussed with the woman and so the recommendation was based on the committee's knowledge, experience and informal consensus. The committee discussed what information and support should be provided about lactation suppression and under what circumstances these should be provided.

As lactation is a natural process that occurs after birth, it is important for women to know how lactation works and what can be done to suppress it, alleviate discomfort and to prevent negative symptoms such as breast engorgement. The committee agreed that practical 'self-help' tips for women would be useful. These could include for example advice about not stimulating the breast, wearing a supportive bra, using ice packs, using over-the-counter pain

relief, and in order to ease breast engorgement, sparingly expressing milk by hand or machine.

Because of the risk of breast engorgement or mastitis, the committee also agreed that women should be given information about when to seek help if there are concerns or problems.

The committee also discussed that there are some pharmacological agents that can help with lactation suppression and women should be made aware of these as in some circumstances they may be appropriate. The benefits and harms of the different self-help and pharmacological methods should be discussed so that the woman can make informed choices about the best approach to them.

The committee also discussed the possibility of milk donation and how for some women this might be a meaningful option. They recognised that this is not a solution to the need to suppress lactation but that it could be emotionally rewarding for some women in circumstances where they are unable to feed their own child. The committee recognised that milk banks are not available everywhere and it might be insensitive to suggest this to some women, therefore, discussion around this needs particular care, sensitivity and individualisation.

The committee discussed that there are many circumstances where lactation suppression might be relevant. Perhaps most commonly, some women choose not to breastfeed. In other cases breastfeeding might be contraindicated due to medical reasons relating to the mother or the baby, such as women with HIV and high viral load, or women having to take medication that contraindicates breastfeeding. The committee recognised the potential emotional stress of not being able to breastfeed and emphasised that the communication to women should be sensitive and individualised as per the recommendations on communication with women, based on the evidence review G.

Information and support about lactation suppression is perhaps particularly important in a situation where the baby has died. In such circumstances, it could be traumatic for women if they were not given information about lactation suppression in a timely and supportive manner. The committee agreed that the timing of and the person delivering the information and support would be dependent on the individual circumstances.

Because of the lack of evidence, a research recommendation was considered but because principles of information provision in general apply to this topic as well and this specific area affects a relatively small number of women, this topic was not prioritised for a research recommendation.

Cost-effectiveness and resource use

No economic evidence is available for this review question. The committee agreed that providing information to women about lactation suppression, at the most appropriate time for the woman, is expected to have a positive effect on women and their partners at a relatively small cost, associated with the health professionals' time spent on offering advice. By informal consensus, the committee also considered the potential harms (including emotional distress or physical symptoms such as breast engorgement) of not providing this information under certain circumstances and concluded that the recommendations ensure efficient use of resources and have a small resource impact relating to health professionals' time spent on offering advice and support to women.

Other factors the committee took into account

The committee noted during protocol development that certain subgroups of women and health care professionals may require special consideration:

- young women (19 years or under)

- women over the age of 40
- women with different cultural background
- women with physical, and or cognitive disabilities
- women who have undergone breast surgery (for example, as part of breast cancer treatment).
- women with contraindication to breastfeeding for example. galactosaemia, HIV, certain medications
- women with severe mental illness
- women who have difficulty accessing postnatal care services
- women whose infant died during the postnatal period, whether explained or unexplained.
- women who no longer have parental responsibility for their baby (including adoption, surrogacy, and court order)

A stratified analysis was therefore predefined in the protocol based on these subgroups. However, considering the lack of evidence for these sub-groups, the committee agreed not to make separate recommendations and that the recommendations they did make should apply universally.

References

No evidence was identified which was applicable to these review questions.

Appendices

Appendix A – Review protocol

Review protocol for review questions:

**What information, and support should be given to women about lactation suppression?
And under what circumstances should the information be provided?**

Table 2: Review protocol

Field (based on PRISMA-P)	Content
Review question	<ul style="list-style-type: none"> • What information, and support should be given to women about lactation suppression? • Under what circumstances should the information be provided?
Type of review question	Views and experiences (qualitative)
Objective of the review	The review aims to determine what information, and support on lactation suppression should be given to women, and under what circumstances
Eligibility criteria – population/disease/condition/issue/domain	Women who have given birth including twins or triplets. Women who have experienced a still birth or neonatal death.
Eligibility criteria – phenomenon of interest	<p>Views and experiences of the information about lactation suppression in the first eight weeks after a singleton or multiple birth.</p> <p>Themes will be identified from the available literature. The committee identified the following potential themes (however, they are aware that not all of these themes may be found in the literature and that additional themes may be identified):</p> <ul style="list-style-type: none"> • timing of the provision of information and support • woman’s preferences in relation to receiving specific information privately or together with partner • level of detail in relation to potential circumstances in which lactation suppression may be appropriate • content of information including opportunities for breast milk donation (Milk banking) • nature of support • consistency of information and support • healthcare professional delivering the information and support • communication skills of the person providing the information and support

Field (based on PRISMA-P)	Content
	<ul style="list-style-type: none"> • setting in which information and support is delivered
Eligibility criteria – comparator(s)	Not applicable, qualitative review
Outcomes and prioritisation	Not applicable, qualitative review
Eligibility criteria – study design	<ul style="list-style-type: none"> • Published full-text papers only • Qualitative studies (for example, studies that use interviews, focus groups, or observations) • Surveys using open ended questions and a qualitative analysis of responses • Studies using a mixed methods design (only the qualitative data will be extracted and risk of bias assessed using the relevant checklist). • Exclusions: <ul style="list-style-type: none"> ○ purely quantitative studies (including surveys reporting only quantitative data) ○ surveys using mainly closed questions or which quantify open ended answers for analysis ○ conference abstracts will not be considered. • Studies will be prioritised for inclusion if they: <ul style="list-style-type: none"> ○ provide comprehensive data, for example covering a wide section of the review population or cover a wide range of themes ○ were published more recently. <p>During data extraction of full texts, data saturation will be monitored and if reached, then exclusions will be made. This means that less comprehensive studies and older studies may be excluded due to data saturation.</p>
Other inclusion exclusion criteria	<p>Only to include studies from the UK as the configuration of antenatal and postnatal services in other countries might not be representative of that in the UK and attitudes in other countries may also differ significantly.</p> <p>Cut-off dates: everything post-1995, subject to monitoring data saturation (as described above).</p>
Proposed sensitivity/sub-group analysis, or meta-regression	<p>Groups that will be reviewed and analysed separately:</p> <ul style="list-style-type: none"> • young women (19 years or under) • women over the age of 40 • women with different cultural background • women with physical, and or cognitive disabilities • women who have undergone breast surgery (for example, as part of breast cancer treatment). • women with contraindication to breastfeeding for example. galactosaemia, HIV, certain medications • women with severe mental illness • women who have difficulty accessing postnatal care services • women whose infant died during the postnatal period, whether explained or unexplained.

Field (based on PRISMA-P)	Content
	<ul style="list-style-type: none"> women who no longer have parental responsibility for their baby (including adoption, surrogacy, and court order)
Selection process – duplicate screening/selection/analysis	Review questions selected as high priorities for health economic analysis (and those selected as medium priorities and where health economic analysis could influence recommendations) will be subject to dual weeding and study selection; any discrepancies above 10% of the dual weeded resources will be resolved through discussion between the first and second reviewers or by reference to a third person. This review question was not prioritised for health economic analysis and so no formal dual weeding, study selection (inclusion/exclusion) or data extraction into evidence tables will be undertaken. (However, internal (NGA) quality assurance processes will include consideration of the outcomes of weeding, study selection and data extraction and the committee will review the results of study selection and data extraction).
Data management (software)	CERQual will be used to assess confidence in the findings from a thematic analysis.
Information sources – databases and dates	<p>The following databases will be searched:</p> <ul style="list-style-type: none"> Embase EMCare MEDLINE and MEDLINE IN-PROCESS PsycINFO <p>Searches will be restricted by:</p> <ul style="list-style-type: none"> date limitations: 1995 to 30th September 2019 English language qualitative/patient concerns
Identify if an update	This guideline will update the NICE guideline on postnatal care up to 8 weeks after birth (CG37) . All reviews are being conducted afresh. The CG37 (2006) did not include recommendations on this topic.
Author contacts	National Guideline Alliance https://www.nice.org.uk/guidance/indevelopment/gid-ng10070
Highlight if amendment to previous protocol	N/A
Search strategy – for one database	For details please see appendix B
Data collection process – forms/duplicate	A standardised evidence table format will be used, and published as appendix D (clinical evidence tables) or H (economic evidence tables) of the guideline. An economic review will not be undertaken, as this is a qualitative systematic review question.
Data items – define all variables to be collected	For details please see evidence tables in appendix D (clinical evidence tables) of the guideline. Economic evidence is not available as this is a qualitative systematic review.
Methods for assessing bias at outcome/study level	Standard study checklists will be used to critically appraise individual studies. For details please see section 6.2 of Developing NICE guidelines: the manual

Field (based on PRISMA-P)	Content
	The risk of bias across all available evidence will be evaluated for each theme using an adaptation of the 'Grading of Recommendations Assessment, Development and Evaluation (GRADE) Confidence in the Evidence from Reviews of Qualitative Research' developed by the international GRADE working group https://www.cerqual.org/
Criteria for quantitative synthesis (where suitable)	Not applicable as this is a qualitative review
Methods for analysis – combining studies and exploring (in)consistency	For a full description of methods see Supplement 1
Meta-bias assessment – publication bias, selective reporting bias	Not applicable as this is a qualitative review
Assessment of confidence in cumulative evidence	For details please see sections 6.4 and 9.1 of Developing NICE guidelines: the manual
Rationale/context – Current management	For details please see the introduction to the evidence review in the guideline.
Describe contributions of authors and guarantor	A multidisciplinary committee developed the guideline. The committee was convened by The National Guideline Alliance and chaired by Dr David Jewell in line with section 3 of Developing NICE guidelines: the manual . Staff from The National Guideline Alliance undertook systematic literature searches, appraised the evidence, conducted meta-analysis and cost-effectiveness analysis where appropriate, and drafted the guideline in collaboration with the committee. For details please see the methods chapter of the guideline.
Sources of funding/support	The National Guideline Alliance is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists
Name of sponsor	The National Guideline Alliance is funded by NICE and hosted by the Royal College of Obstetricians and Gynaecologists
Roles of sponsor	NICE funds The National Guideline Alliance to develop guidelines for those working in the NHS, public health, and social care in England
PROSPERO registration number	This protocol has not been registered in PROSPERO

CERQual: Confidence in the Evidence from Reviews of Qualitative Research; GRADE: Grading of Recommendations Assessment, Development and Evaluation; NGA: National Guideline Alliance NICE: National Institute for Health and Care Excellence.

Appendix B – Literature search strategies

Literature search strategies for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

Clinical search

The search for this topic was last run on 30th September 2019.

Database: Emcare, Embase, Medline, Medline Ahead of Print and In-Process & Other Non-Indexed Citations, PsycINFO – OVID [Multifile]

#	Search
1	perinatal period/ or exp postnatal care/
2	1 use emczd, emcr
3	postpartum period/ or peripartum period/ or postnatal care/
4	3 use ppez
5	postnatal period/ or perinatal period/
6	5 use psyh
7	((first time or new) adj mother*) or nullipara* or peri natal* or perinatal* or postbirth or post birth or post childbirth or postdelivery or post delivery or postnatal* or post natal* or postpartum* or post partum* or primipara* or puerpera* or puerperium* or ((after or following or post) adj2 (birth* or delivery or labour or labour))).ti,ab.
8	or/2,4,6-7
9	lactation suppression/ use emczd, emcr or *lactation/ use ppez or *lactation/ use psyh
10	((arrest* or cease or cessat* or discontinue* or inhibit* or stop* or remov* or suppress*) adj5 (breastfed or breastfeed* or breast feed* or lactat* or milk or breastmilk)) or ((arrest* or cease or cessat* or discontinue* or inhibit* or stop* or remov* or suppress*) adj3 produc* adj3 (breastfed or breastfeed* or breast feed* or lactat* or milk or breastmilk)).ti,ab.
11	((breastmilk or milk) adj2 donat*) or milk bank*).ti,ab.
12	or/9-11
13	united kingdom/
14	(national health service* or nhs*).ti,ab,in,ad.
15	(english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab.
16	(gb or "g.b." or britain* or (british* not "british columbia") or uk or "u.k." or united kingdom* or (england* not "new england") or northern ireland* or northern irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales") or welsh*).ti,ab,jw,in,ad.
17	(bath or "bath's" or ((birmingham not alabama*) or ("birmingham's" not alabama*) or bradford or "bradford's" or brighton or "brighton's" or bristol or "bristol's" or carlisle* or "carlisle's" or (cambridge not (massachusetts* or boston* or harvard*)) or ("cambridge's" not (massachusetts* or boston* or harvard*)) or (canterbury not zealand*) or ("canterbury's" not zealand*) or chelmsford or "chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry or "coventry's" or derby or "derby's" or (durham not (carolina* or nc)) or ("durham's" not (carolina* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or "gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or "lancaster's" or leeds* or leicester or "leicester's" or (lincoln not nebraska*) or ("lincoln's" not nebraska*) or (liverpool not (new south wales* or nsw)) or ("liverpool's" not (new south wales* or nsw)) or ((london not (ontario* or ont or toronto*)) or ("london's" not (ontario* or ont or toronto*)) or manchester or "manchester's" or (newcastle not (new south wales* or nsw)) or ("newcastle's" not (new south wales* or nsw)) or norwich or "norwich's" or nottingham or "nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or plymouth or "plymouth's" or portsmouth or

#	Search
	"portsmouth's" or preston or "preston's" or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's" or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or wells or westminster or "westminster's" or winchester or "winchester's" or wolverhampton or "wolverhampton's" or (worchester not (massachusetts* or boston* or harvard*)) or ("worchester's" not (massachusetts* or boston* or harvard*)) or (york not ("new york*" or ny or ontario* or ont or toronto*)) or ("york's" not ("new york*" or ny or ontario* or ont or toronto*))))).ti,ab,in,ad.
18	(bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or st asaph or "st asaph's" or st davids or swansea or "swansea's").ti,ab,in,ad.
19	(aberdeen or "aberdeen's" or dundee or "dundee's" or edinburgh or "edinburgh's" or glasgow or "glasgow's" or inverness or (perth not australia*) or ("perth's" not australia*) or stirling or "stirling's").ti,ab,in,ad.
20	(armagh or "armagh's" or belfast or "belfast's" or lisburn or "lisburn's" or londonderry or "londonderry's" or derry or "derry's" or newry or "newry's").ti,ab,in,ad.
21	or/13-20
22	(exp "arctic and antarctic"/ or exp oceanic regions/ or exp western hemisphere/ or exp africa/ or exp asia/ or exp "australia and new zealand"/) not (united kingdom/ or europe/)
23	21 not 22
24	23 use emczd, emcr
25	exp united kingdom/
26	(national health service* or nhs*).ti,ab,in.
27	(english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab.
28	(gb or "g.b." or britain* or (british* not "british columbia") or uk or "u.k." or united kingdom* or (england* not "new england") or northern ireland* or northern irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales") or welsh*).ti,ab,jw,in.
29	(bath or "bath's" or ((birmingham not alabama*) or ("birmingham's" not alabama*)) or bradford or "bradford's" or brighton or "brighton's" or bristol or "bristol's" or carlisle* or "carlisle's" or (cambridge not (massachusetts* or boston* or harvard*)) or ("cambridge's" not (massachusetts* or boston* or harvard*)) or (canterbury not zealand*) or ("canterbury's" not zealand*) or chelmsford or "chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry or "coventry's" or derby or "derby's" or (durham not (carolina* or nc)) or ("durham's" not (carolina* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or "gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or "lancaster's" or leeds* or leicester or "leicester's" or (lincoln not nebraska*) or ("lincoln's" not nebraska*) or (liverpool not (new south wales* or nsw)) or ("liverpool's" not (new south wales* or nsw)) or ((london not (ontario* or ont or toronto*)) or ("london's" not (ontario* or ont or toronto*)) or manchester or "manchester's" or (newcastle not (new south wales* or nsw)) or ("newcastle's" not (new south wales* or nsw)) or norwich or "norwich's" or nottingham or "nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or plymouth or "plymouth's" or portsmouth or "portsmouth's" or preston or "preston's" or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's" or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or wells or westminster or "westminster's" or winchester or "winchester's" or wolverhampton or "wolverhampton's" or (worchester not (massachusetts* or boston* or harvard*)) or ("worchester's" not (massachusetts* or boston* or harvard*)) or (york not ("new york*" or ny or ontario* or ont or toronto*)) or ("york's" not ("new york*" or ny or ontario* or ont or toronto*))))).ti,ab,in.
30	(bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or st asaph or "st asaph's" or st davids or swansea or "swansea's").ti,ab,in.
31	(aberdeen or "aberdeen's" or dundee or "dundee's" or edinburgh or "edinburgh's" or glasgow or "glasgow's" or inverness or (perth not australia*) or ("perth's" not australia*) or stirling or "stirling's").ti,ab,in.

#	Search
32	(armagh or "armagh's" or belfast or "belfast's" or lisburn or "lisburn's" or londonderry or "londonderry's" or derry or "derry's" or newry or "newry's").ti,ab,in.
33	or/25-32
34	(exp africa/ or exp americas/ or exp antarctic regions/ or exp arctic regions/ or exp asia/ or exp oceania/) not (exp great britain/ or europe/)
35	33 not 34
36	35 use ppez
37	(national health service* or nhs*).ti,ab,in,cq.
38	(english not ((published or publication* or translat* or written or language* or speak* or literature or citation*) adj5 english)).ti,ab.
39	(gb or "g.b." or britain* or (british* not "british columbia") or uk or "u.k." or united kingdom* or (england* not "new england") or northern ireland* or northern irish* or scotland* or scottish* or ((wales or "south wales") not "new south wales") or welsh*).ti,ab,jx,in,cq.
40	(bath or "bath's" or ((birmingham not alabama*) or ("birmingham's" not alabama*) or bradford or "bradford's" or brighton or "brighton's" or bristol or "bristol's" or Carlisle* or "Carlisle's" or (cambridge not (massachusetts* or boston* or harvard*)) or ("cambridge's" not (massachusetts* or boston* or harvard*)) or (canterbury not zealand*) or ("canterbury's" not zealand*) or chelmsford or "chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry or "coventry's" or derby or "derby's" or (durham not (carolina* or nc)) or ("durham's" not (carolina* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or "gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or "lancaster's" or leeds* or leicester or "leicester's" or (lincoln not nebraska*) or ("lincoln's" not nebraska*) or (liverpool not (new south wales* or nsw)) or ("liverpool's" not (new south wales* or nsw)) or ((london not (ontario* or ont or toronto*)) or ("london's" not (ontario* or ont or toronto*)) or manchester or "manchester's" or (newcastle not (new south wales* or nsw)) or ("newcastle's" not (new south wales* or nsw)) or norwich or "norwich's" or nottingham or "nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or plymouth or "plymouth's" or portsmouth or "portsmouth's" or preston or "preston's" or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's" or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or wells or westminster or "westminster's" or winchester or "winchester's" or wolverhampton or "wolverhampton's" or (worcester not (massachusetts* or boston* or harvard*)) or ("worcester's" not (massachusetts* or boston* or harvard*)) or (york not ("new york*" or ny or ontario* or ont or toronto*)) or ("york's" not ("new york*" or ny or ontario* or ont or toronto*))))).ti,ab,in,cq.
41	(bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or st asaph or "st asaph's" or st davids or swansea or "swansea's").ti,ab,in,cq.
42	(aberdeen or "aberdeen's" or dundee or "dundee's" or edinburgh or "edinburgh's" or glasgow or "glasgow's" or inverness or (perth not australia*) or ("perth's" not australia*) or stirling or "stirling's").ti,ab,in,cq.
43	(armagh or "armagh's" or belfast or "belfast's" or lisburn or "lisburn's" or londonderry or "londonderry's" or derry or "derry's" or newry or "newry's").ti,ab,in,cq.
44	or/37-43
45	44 use psych
46	or/24,36,45
47	8 and 12 and 46
48	cluster analysis/ or content analysis/ or discourse analysis/ or ethnography/ or grounded theory/ or health care survey/ or exp interviews/ or narrative/ or nursing methodology research/ or observation/ or personal experience/ or phenomenology/ or qualitative research/ or questionnaire/ or exp recording/
49	48 use emczd, emcr
50	anthropology, cultural/ or cluster analysis/ or focus groups/ or grounded theory/ or health care surveys/ or interview.pt. or interviews as topic/ or narration/ or nursing methodology research/

#	Search
	or observation/ or personal narratives as topic/ or personal narrative/ or qualitative research/ or "surveys and questionnaires"/ or sampling studies/ or tape recording/ or videodisc recording/
51	50 use ppez
52	"experiences (events)"/ or cluster analysis/ or content analysis/ or discourse analysis/ or ethnography/ or grounded theory/ or interviewers/ or interviewing/ or interviews/ or narratives/ or observation methods/ or phenomenology/ or qualitative methods/ or questionnaires/ or questioning/ or exp surveys/ or tape recorders/
53	52 use psych
54	(qualitative* or interview* or focus or group* or questionnaire* or narrative* or narration* or survey*).ti,ab.
55	(ethno* or emic or etic or phenomenolog* or grounded theory or constant compar* or (thematic adj4 analys*) or theoretical sampl* or purposive sampl*).tw.
56	(hermeneutic* or heidegger* or husser* or colaizzi* or van kaam* or van manen* or giorgi* or glaser* or strauss* or ricoeur* or spiegelberg* or merleau*).tw.
57	(metasynthes* or meta-synthes* or metasummar* or meta-summar* or metastud* or meta-stud* or metathem* or meta-them*).tw.
58	(critical interpretive synthes* or (realist adj (review* or synthes*)) or (noblit and hare) or (meta adj (method or triangulation)) or (cerqual or conqual) or ((thematic or framework) adj synthes*).tw.
59	or/49,51,53-58
60	((brother* or famil* or father* or husband* or mother* or partner* or relative* or sibling* or sister* or spous*) adj6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*).ti,ab.
61	((consumer* or inpatient* or in-patient* or mother* or parent* or patient* or wife* or wive* or women* or woman*) adj6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*).ti,ab.
62	((clinician* or counselor* or counsellor* or health worker* or health visitor* or midwi* or nurs* or personnel* or physician* or professional*) adj6 (experience* or belief* or stress* or emotion* or anx* or fear* or concern* or uncertain* or unsure or thought* or feeling* or felt* or view* or opinion* or perception* or perspective* or attitud* or satisfact* or know* or understand* or aware*).ti,ab.
63	or/60-62
64	or/59,63
65	12 and 46 and 64
66	47 or 65
67	limit 66 to english language
68	limit 67 to yr="1995 -current"

Health economic search

The search for this topic was last run on 5th December 2019.

Database: Emcare, Embase, Medline, Medline Ahead of Print and In-Process & Other Non-Indexed Citations (global) – OVID [Multifile]

#	Search
1	puerperium/ or perinatal period/ or postnatal care/
2	1 use emczd, emcr
3	postpartum period/ or peripartum period/ or postnatal care/
4	3 use ppez

#	Search
5	(nullipara* or peri natal* or perinatal* or postbirth or post birth or postdelivery or post delivery or postnatal* or post natal* or postpartum* or post partum* or primipara* or puerpera* or puerperium* or ((after or follow*) adj2 birth*)).ti,ab.
6	or/2,4-5
7	breast feeding/ or breast feeding education/ or lactation/
8	7 use emczd, emcr
9	exp breast feeding/ or lactation/
10	9 use ppez
11	(breastfeed* or breast feed* or breastfed* or breastfeed* or breast fed or breastmilk or breast milk or expressed milk* or lactat* or (nursing adj (baby or infant* or mother* or neonate* or newborn*))).ti,ab.
12	or/8,10-11
13	artificial food/ or bottle feeding/ or infant feeding/
14	13 use emczd, emcr
15	bottle feeding/ or infant formula/
16	15 use ppez
17	((((bottle or formula or synthetic) adj2 (artificial or fed or feed* or infant* or milk*)) or (artificial adj (formula or milk)) or bottlefed or bottlefeed or cup feeding or (milk adj2 (substitut* or supplement*)) or ((infant or milk or water or glucose or dextrose or formula) adj supplement) or formula supplement* or supplement feed or milk feed or ((baby or babies or infant* or neonate* or newborn*) adj (formula* or milk)) or formulafeed or formulated or (milk adj2 powder*) or hydrolyzed formula* or (((feeding or baby or infant) adj bottle*) or infant feeding or bottle nipple* or milk pump*))).ti,ab.
18	or/14,16-17
19	or/6,12,18
20	budget/ or exp economic evaluation/ or exp fee/ or funding/ or exp health care cost/ or health economics/
21	20 use emczd, emcr
22	exp budgets/ or exp "costs and cost analysis"/ or economics/ or exp economics, hospital/ or exp economics, medical/ or economics, nursing/ or economics, pharmaceutical/ or exp "fees and charges"/ or value of life/
23	22 use ppez
24	budget*.ti,ab. or cost*.ti. or (economic* or pharmaco?economic*).ti. or (price* or pricing*).ti,ab. or (cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab. or (financ* or fee or fees).ti,ab. or (value adj2 (money or monetary)).ti,ab.
25	or/21,23-24
26	economic model/ or quality adjusted life year/ or "quality of life index"/
27	(cost-benefit analysis.sh. and (cost-effectiveness ratio* and (perspective* or life expectanc*)).tw.)
28	((quality of life or qol).tw. and cost benefit analysis.sh.)
29	or/26-28 use emczd, emcr
30	models, economic/ or quality-adjusted life years/
31	(cost-benefit analysis.sh. and (cost-effectiveness ratio* and (perspective* or life expectanc*)).tw.)
32	((quality of life or qol).tw. and cost-benefit analysis.sh.)
33	or/30-32 use ppez
34	(eq-5d* or eq5d* or eq-5* or eq5* or euroqual* or euro qual* or euroqual 5d* or euro qual 5d* or euro qol* or euroqol* or euro qual* or euroquol* or euro quol5d* or

#	Search
	euroqol5d* or eur qol* or eurqol* or eur qol5d* or eurqol5d* or eur?qul* or eur?qul5d* or euro* quality of life or european qol).tw.
35	(euro* adj3 (5 d* or 5d* or 5 dimension* or 5dimension* or 5 domain* or 5domain*)).tw.
36	(hui or hui2 or hui3).tw.
37	(illness state* or health state*).tw.
38	(multiattribute* or multi attribute*).tw.
39	(qaly* or qal or qald* or qale* or qtime* or qwb* or daly).tw.
40	(quality adjusted or quality adjusted life year*).tw.
41	(sf36 or sf 36 or sf thirty six or sf thirtysix).tw.
42	sickness impact profile.sh.
43	(time trade off*1 or time tradeoff*1 or tto or timetradeoff*1).tw.
44	(utilit* adj3 (score*1 or valu* or health* or cost* or measur* or disease* or mean or gain or gains or index*)).tw.
45	utilities.tw.
46	((qol or hrqol or quality of life).tw. or *quality of life/) and ((qol or hrqol* or quality of life) adj2 (change*1 or declin* or decreas* or deteriorat* or effect or effects or high* or impact*1 or impacted or improve* or increas* or low* or reduc* or score or scores or worse)).ab.
47	quality of life.sh. and ((health-related quality of life or (health adj3 status) or ((quality of life or qol) adj3 (chang* or improv*)) or ((quality of life or qol) adj (measure*1 or score*1))).tw. or (quality of life or qol).ti. or ec.fs.)
48	or/29,33-47
49	or/25,48
50	19 and 50
51	limit 50 to english language
52	(animals/ not humans/) or exp animals, laboratory/ or exp animal experimentation/ or exp models, animal/ or exp rodentia/
53	52 use ppez
54	(animal/ not human/) or nonhuman/ or exp animal experiment/ or exp experimental animal/ or animal model/ or exp rodent/
55	54 use emczd, emcr
56	(rat or rats or mouse or mice).ti.
57	or/53,55-56
58	51 not 57

Database: HTA, NHS EED (global) [CRD Web]

#	Search
1	mesh descriptor postpartum period in hta, nhs eed
2	mesh descriptor peripartum period in hta, nhs eed
3	mesh descriptor postnatal care in hta, nhs eed
4	(nullipara* or peri natal* or perinatal* or postbirth or post birth or postdelivery or post delivery or postnatal* or post natal* or postpartum* or post partum* or primipara* or puerpera* or puerperium* or ((after or follow*) near2 birth*)) in hta, nhs eed
5	#1 or #2 or #3 or #4
6	mesh descriptor breast feeding explode all trees in hta, nhs eed
7	mesh descriptor lactation in hta, nhs eed
8	(breastfeed* or breast feed* or breastfed* or breastfeed* or breast fed or breastmilk or breast milk or expressed milk* or lactat* or (nursing next (baby or infant* or mother* or neonate* or newborn*))) in hta, nhs eed
9	#6 or #7 or #8

#	Search
10	mesh descriptor bottle feeding in hta, nhs eed
11	mesh descriptor infant formula in hta, nhs eed
12	(((bottle or formula or synthetic) near2 (artificial or fed or feed* or infant* or milk*)) or (artificial next (formula or milk)) or bottlefed or bottlefeed or cup feeding or (milk near2 (substitut* or supplement*)) or ((infant or milk or water or glucose or dextrose or formula) next supplement) or formula supplement* or supplement feed or milk feed or ((baby or babies or infant* or neonate* or newborn*) next (formula* or milk)) or formula feed or formulated or (milk near2 powder*) or hydrolyzed formula* or (((feeding or baby or infant) next bottle*) or infant feeding or bottle nipple* or milk pump*)) in hta, nhs eed
13	#10 or #11 or #12
14	#5 or #9 or #13

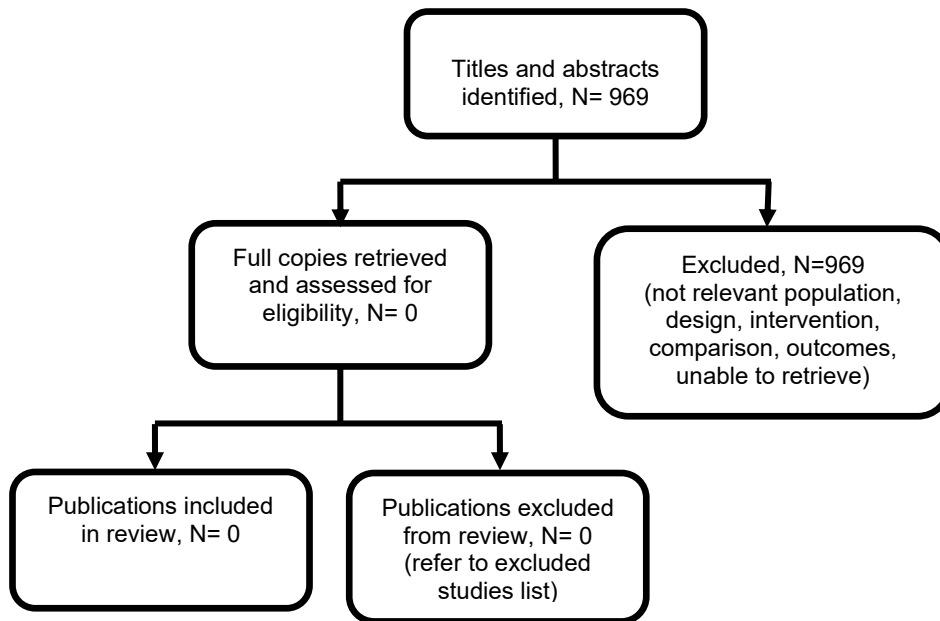
Appendix C – Clinical evidence study selection

Study selection for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

Figure 1: Study selection flow chart



Appendix D – Clinical evidence tables

Evidence tables for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

No evidence was identified which was applicable to these review questions.

Appendix E – Forest plots

Forest plots for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

No meta-analysis was conducted for these review questions and so there are no forest plots.

Appendix F – GRADE tables

GRADE tables for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

No evidence was identified which was applicable to these review questions.

Appendix G – Economic evidence study selection

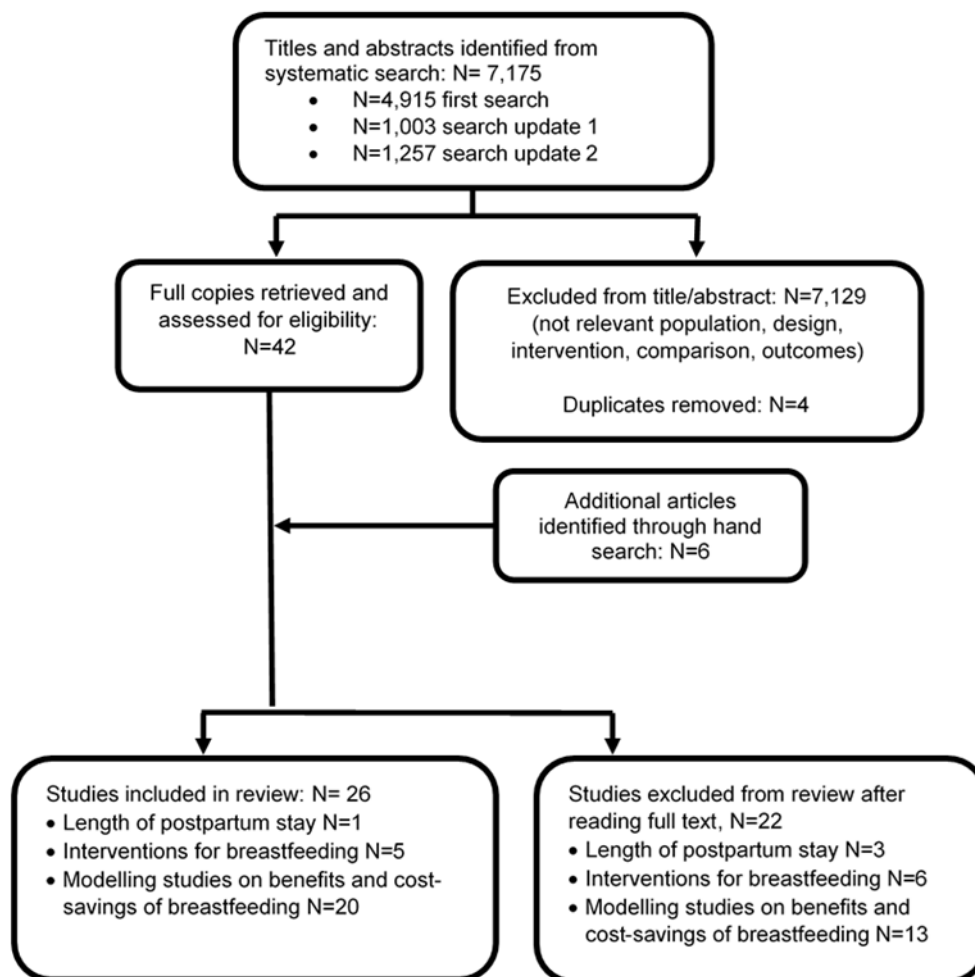
Economic evidence study selection for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

A global health economics search was undertaken for all areas covered in the guideline. Figure 2 shows the flow diagram of the selection process for economic evaluations of postnatal care interventions, including modelling studies on the benefits and cost-savings of breastfeeding.

Figure 2. Flow diagram of selection process for economic evaluations of postnatal care interventions and modelling studies on the benefits and cost-savings of breastfeeding



Appendix H – Economic evidence tables

Economic evidence tables for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

No economic evidence was identified which was applicable to these review questions.

Appendix I – Economic evidence profiles

Economic evidence profiles for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

No economic evidence was identified which was applicable to this these review questions.

Appendix J – Economic analysis

Economic analysis for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

No economic analysis was conducted for these review questions.

Appendix K – Excluded studies

Appendix K – Excluded studies for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

Clinical studies

All studies identified in the search were excluded at the title and abstract stage. Therefore, no clinical evidence was identified for these review questions.

Economic studies

No economic evidence was identified for these review questions.

Appendix L – Research recommendations

Research recommendations for review questions:

What information, and support should be given to women about lactation suppression?

And under what circumstances should the information be provided?

No research recommendations were made for these review questions.