# National Institute for Health and Care Excellence

Final

# **Postnatal care**

[G] Provision of information about the postnatal health of women

NICE guideline NG194 Evidence review underpinning recommendations 1.1.1 to 1.1.7 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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## Provision of information about the postnatal health of women

### **Review question**

When and how should information be given to mothers and their partners about postnatal health of the mother?

#### Introduction

The life-change for families, most obviously after the birth of their first child but also after subsequent births, gives the woman new and unfamiliar problems with her own health to understand and handle. Providing information related to a woman's postnatal health addresses the needs of mothers and their partners. In addition to supporting good health, it should enable them to take an active part in decision-making related to their care. The aim of this review was to find out from the woman's perspective when the optimal time would be and through what method of delivery 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.

Population	Women who have given birth (to a singleton, twins or triplets), from the birth of the baby to 8 weeks after birth, and their partners.
Phenomenon of Interest	Views and experiences of the way in which information about self-care (including both physical health and emotional well-being) is provided, and the timing of information provision.
	Themes will be identified from the available literature, but expected themes are:
	<ul> <li>Preferences on whether specific information should be provided before or after transfer to community care</li> </ul>
	<ul> <li>Level of detail in relation to potential complications</li> </ul>
	<ul> <li>Woman's preferences in relation to receiving specific information privately or together with partner</li> </ul>
	<ul> <li>Format of information provision (for example, using videos)</li> </ul>
	Consistency of information
	Modality of birth
	<ul> <li>Healthcare professional delivering the information</li> </ul>
	<ul> <li>Communication skills of the person providing the information</li> </ul>
	<ul> <li>Setting in which information is delivered</li> </ul>
Context	Studies from the UK and high income countries.

#### Table 1: Summary of the protocol (PICo table)

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 <u>Developing NICE</u> 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 <u>conflicts of interest policy</u>. Those interests declared before July 2019 were reclassified according to NICE's 2019 conflicts of interest policy.

#### **Clinical evidence**

#### **Included studies**

Eleven qualitative studies were included (Brown 2014, Haith-Cooper 2018, Henshaw 2018, Olander 2012, Persson 2011, Shorey 2015, Shorey 2018, Shorey 2019, Sundstrom 2016, Weckesser 2019 and Weston 2014). Three studies were conducted in the US, four studies were conducted in the UK, three studies were conducted in Singapore and one study was conducted in Sweden. One study was on adolescent women (Brown 2014), the remaining ten were not age-range specific. One study (Haith-Cooper 2018) included a subgroup of vulnerable women, described as migrant women who were attending a specialist National Childbirth Trust (NCT)-funded postnatal support group. This study (Haith-Cooper 2018) specifically discussed information provision surrounding sepsis prevention and included midwives. Data from the midwives were not extracted as the population of interest for this review were just the women who have given birth. One study (Weckesser 2019) recruited women who had had a caesarean section in order to discuss caesarean section recovery and infection prevention. Two studies recruited a mix of postnatal and antenatal women. In these studies, data has only been extracted when it is clear they are the views of postnatal women (Olander 2012 and Weston 2014).

Studies focused on how particular information sharing interventions were received or how they felt about seeking information rather than specifically addressing the review question of when and how do women wish to receive information about their postnatal health. One study discussed healthy eating support services for pregnant and postnatal women (Olander 2012). Four studies evaluated an intervention: receiving text blasts (Brown 2014), a psychoeducation programme (Shorey 2015), use of a health app (mHealth; Shorey 2018) and use of a technology-based supportive educational parenting program (Shorey 2019). Two studies focused on specific postnatal health conditions: sepsis (Haith-Cooper 2018) and caesarean section wound infection (Weckesser 2019). The remaining studies reported data about women's preferences for receiving information generally that is not specific to their health (Henshaw 2018, Persson 2011, Sundstrom 2016 and Weston 2014), or about where they go to seek information.

Data from the included studies were explored in a number of central themes and subthemes:

#### Theme 1. Preferences about timing of specific information provision

Sub-theme 1.1. When pregnant. Sub-theme 1.2. After birth. Sub-theme 1.3. After caesarean section surgery. Sub-theme 1.4. Before discharge whilst in hospital. Sub-theme 1.5. At discharge.

#### Theme 2. Level of detail

#### Sub-theme 2.1. Too much or too little information.

#### Theme 3. Receiving information privately or as a group

Sub-theme 3.1. Group sessions. Sub-theme 3.2. With their partner.

#### Theme 4. Format of the information provided

Sub-theme 4.1. Text messages. Sub-theme 4.2. Practical sessions. Sub-theme 4.3. Hand book. Sub-theme 4.4. Mixture. Sub-theme 4.5. Verbally. Sub-theme 4.6. Leaflets. Sub-theme 4.7. Phone-App. Sub-theme 4.8. Web-based. Sub-theme 4.9. Through media.

#### Theme 5. Consistency of information

Sub-theme 5.1. Being given consistent advice.

#### Theme 6. Who delivers the information

Sub-theme 6.1. Women with direct experience Sub-theme 6.2. Health professionals.

#### Theme 7. Communication skills of the person delivering information

Sub-theme 7.1. Need for clarity

#### Theme 8. Location of information sessions

Sub-theme 8.1. Convenient locations.

The included studies are summarised in Table 2.

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

#### **Excluded studies**

Studies not included in this review are listed, and reasons for their exclusion are provided in appendix K.

#### Summary of studies included in the evidence review

Summaries of the studies that were included in this review are presented in Table 2.

Table 2: Summary of included studies.			
Study and aim of study	Participants	Methods	Themes
Brown 2014 US Aim of the study • To examine use of technology for delivering a health promotion intervention via text blasts in single, low- income, adolescent, minority mothers and to describe their perceptions and experiences with the intervention.	N=5 single, low-income postpartum adolescents individuals who had taken part in a health promotion intervention via text blasts.	Semi-structured face- to-face interviews, monthly during the 6 month intervention	<ul> <li>Format of the information provided</li> </ul>
<ul> <li>Haith-Cooper 2018</li> <li>England, UK</li> <li>Aim of the study</li> <li>To explore the perceptions of women and senior student midwives related to the postnatal hospital discharge process and maternal sepsis prevention advice.</li> </ul>	N=23 n=9 student midwives n=9 Women who had given birth in the past year n=5 vulnerable migrant women	3 focus groups	<ul> <li>Preference on when specific information should be provided</li> <li>Level of detail</li> <li>Format of the information provided</li> <li>Consistency of information</li> </ul>
<ul> <li>Henshaw 2018</li> <li>US</li> <li>Aim of the study</li> <li>To explore common challenges along with support and education needs experienced during the first 6 weeks postpartum</li> </ul>	N=33 n=26 women n=6 partners n=1 sister	Focus groups of 4-10 participants	<ul> <li>Preference on when specific information should be provided</li> <li>Level of detail</li> <li>Format of the information provided</li> </ul>
Olander 2012 England, UK Aim of the study • To explore what type of healthy eating services and	N=14 postnatal women (also N=9 prenatal, but their quotes were not extracted) from a deprived area in the Midlands of England	Semi-structured focus groups	<ul> <li>Preference on when specific information should be provided</li> <li>Receiving information privately or as a group</li> </ul>

#### Table 2:Summary of included studies.

Provision of information about the postnatal health of women

Study and aim of study	Participants	Methods	Themes
support prenatal and postnatal women want			<ul> <li>Format of the information provided</li> <li>Who should deliver the information</li> <li>Location of information sessions</li> </ul>
Persson 2011 Sweden Aim of the study • To report factors which influence mothers' sense of security during the first postnatal week.	N=14 postnatal women, n=11 with their first child and n=3 with their second	Interviews 1, 3 and 6 were focus group discussions with five, three and two respondents, respectively whilst interviews 2, 4, 5 and 7 were individual interviews.	<ul> <li>Preference on when specific information should be provided</li> <li>Receiving information privately or as a group</li> <li>Consistency of information</li> <li>Communication skills of the person delivering information</li> </ul>
Shorey 2015 Singapore Aim of the study • To explore the perceptions of primiparas on the contents, delivery and personal impact of postnatal psychoeducation programme	N=18 postnatal women who had previously been recruited to the RCT that assessed a postnatal psychoeducation programme	Semi-structured interviews that were face-to-face at weeks 6 to 9 post-partum in the mothers home.	<ul> <li>Format of the information provided</li> <li>Location of information sessions</li> </ul>
<ul> <li>Shorey 2018</li> <li>Singapore</li> <li>Aim of the study</li> <li>To explore the views of parents of newborns with regard to the content and delivery of a mobile health (mHealth) app–based</li> </ul>	N=17 women (from the intervention group of a RCT)	Semi-structured interviews	<ul> <li>Preference on when specific information should be provided</li> <li>Format of the information provided</li> </ul>

Study and aim of study	Participants	Methods	Themes
postnatal educational			
program			
Shorey 2019 Singapore	N=16 women (recruited from a RCT)	Face-to-face semi- structured interviews	<ul> <li>Preference on when specific information</li> </ul>
<ul> <li>Aim of the study</li> <li>To examine the experiences and perceptions of participants who participated</li> </ul>	n=6 from the control group n=10 from the intervention group		<ul><li>should be</li><li>provided</li><li>Format of the</li><li>information</li><li>provided</li></ul>
in a supportive education parenting program intervention study.			
Sundstrom 2016 US	N=44 postnatal women	Semi-structured interviews either at hospital or over the phone	<ul> <li>Format of the information provided</li> <li>Who should</li> </ul>
Aim of the study			provide the information
<ul> <li>Understanding women's feelings towards media for health issues</li> </ul>			
Weckesser 2019	N=21 postnatal women following a caesarean section	Focus groups (n=15) and telephone interviews (n=6)	Preference on when specific
England, UK	Section		information should be provided
Aim of the study			Level of detail
• To understand women's own priorities and information needs in relation to caesarean section recovery and infection prevention			<ul> <li>Format of the information provided</li> </ul>
Weston 2014	N=6 postnatal women (also N=13 midwives	One focus group for postnatal women and	• Format of information
England, UK	and N=7 antenatal women, but their quotes were not	one-to-one interviews with two women who were uninvolved in	<ul><li>provided</li><li>Who should</li></ul>
Aim of the study	extracted)	the focus groups	deliver the information
• To explore the experiences of midwives, antenatal and postnatal women to try to discover their perceptions of the value of internet use in			
pregnancy			

RCT: randomised controlled trial

See the full evidence tables in appendix D. No meta-analysis was conducted (and so there are no forest plots in appendix E).

#### Quality assessment of studies included in the evidence review

See the 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 this review question. 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 this review.

#### **Economic model**

No economic modelling was undertaken for this review because the committee agreed that other topics were higher priorities for economic evaluation.

#### **Evidence statements**

#### **Clinical evidence statements**

#### Theme 1. Preferences about timing of specific information provision

- Sub-theme 1.1. When pregnant. Low quality evidence from 5 studies from the UK (2 studies), Sweden (1 study) and Singapore (2 studies) report that women and partners preferred receiving information whilst the woman was pregnant and had more time to participate in courses, read and digest information and prepare for health issues that might arise.
   Particularly in the case of health information that required behaviour changes such as healthy eating, women felt that making these changes whilst pregnant would increase the likelihood of sustaining them once the baby had arrived.
- **Sub-theme 1.2. After birth.** Low quality evidence from 1 study from Sweden reported that women wished to have a postpartum talk with the delivery midwife enabling them to ask questions and get help as necessary.
- Sub-theme 1.3. After caesarean section surgery. Low quality evidence from 1 study from the UK reported how women were unable to recall information that was given to them about wound care and infection prevention if given shortly after the surgery. From this we can infer that providing information soon after surgery would not be appropriate.
- Sub-theme 1.4. Before discharge whilst in hospital. Very low quality evidence from 2 studies from Sweden (1 study) and the US (1 study) suggested there are mixed views about whether information should be given before discharge from hospital. One study reported that women wished to receive preventive information before discharge from the hospital including hints and advice about problems and situations that are common during the first days after discharge. Women had worried about what they now saw as 'very small problems', which

could have been avoided if they had known that the 'small problem' was not unusual. Whilst one study reported how women found it hard to recall information that was given to them in hospital, suggesting this is not the best time to provide information.

• Sub-theme 1.5. At discharge. Low quality evidence from 1 UK study suggested that the point of discharge was not the best time to provide information. During the discharge process women felt they were being given a lot of verbal information that was difficult to retain whilst also feeling rushed by the midwife to leave. This resulted in women feeling they were not receiving all the information they should. In addition, some women were themselves in a rush to get out of the hospital and consequently were not making full use of the information available to them.

#### Theme 2. Level of detail

• Sub-theme 2.1. Too much or too little information. Low quality evidence from 3 studies from the UK (2 studies) and US (1 study) showed there are mixed views about the ideal amount of information that should be shared in the postnatal period. One study reported how women felt there was too much verbal information given at discharge for them to be able to recall specific details. Some women also felt they were given too many leaflets that went unread. On the other hand 2 studies reported how women did not feel like they were given enough information, particularly regarding caesarean section aftercare and postpartum depression.

#### Theme 3. Receiving information privately or as a group

- **Sub-theme 3.1. Group sessions.** Very low quality evidence from 1 study from the UK indicated that women receiving information on behaviour change (healthy eating) would prefer this to be in a group session however, it was acknowledged that group sessions might not work for everyone and a choice should be offered.
- Sub-theme 3.2. With their partner. Low quality evidence from 1 study from Sweden indicated that women wished for their partner to be involved, acknowledged and included in discussions. Women found that their partners were often dismissed by healthcare professionals.

#### Theme 4. Format of the information provided

- **Sub-theme 4.1. Text messages.** Very low quality evidence from 2 studies from the US reported that women viewed texting as a flexible, accessible and familiar method of communication. Information given via text message is easily stored, can be forwarded on to friends and family and can be referred to at a later date.
- Sub-theme 4.2. Practical sessions. Very low quality evidence from 1 study from the UK suggested that information about healthy eating should be delivered as practical sessions where women could be shown how to alter their diet and cook healthy meals. Practical sessions would be preferable to leaflets describing how to cook healthy meals.
- Sub-theme 4.3. Hand book. Very low quality evidence from 1 study from Singapore reported mixed views about receiving information in a hand book. Women who received a hand book in addition to a psychoeducation programme said it was easy to understand with a good structure, simple layout and pictures and it helpfully had a contents page, important contact details, and was a good size. However, the hand book did not contain all the information women wanted.

- Sub-theme 4.4. Mixture. Very low quality evidence from 1 study from Singapore reported that women were happy to receive information though home visits followed by telephone calls and supported with an educational booklet as part of the psychoeducation programme. When reflecting on the number of visits or phone calls women generally wanted more than the programme offered. Web-based learning was also suggested to be added.
- Sub-theme 4.5. Verbally. Low quality evidence from 1 study from the UK reported that women felt there was too much information given to them verbally, particularly at discharge. Women were unable to recall specific details.
- **Sub-theme 4.6. Leaflets.** Low quality evidence from 3 studies from the UK (2 studies) and the US (1 study) reported how women felt they were given too many leaflets to read. Women also reported that the leaflets did not provide enough information. On the other-hand some women favour leaflets because they could be taken home and be referred to at a later time.
- Sub-theme 4.7. Phone-App. Very low quality evidence from 2 studies from Singapore reported mixed experiences with phone apps. Some women and partners found using the app a good resource for information, with user-friendly features and easy to find, tailored information. It was valuable that midwives could be contacted through the app and that different learning styles were catered for with information being provided in pdfs, audio and videos. However, there were some technical issues with the app, and some people wanted it to cover a wider range of topics.
- **Sub-theme 4.8. Web-based.** Very low quality evidence from 3 studies from Singapore (1 study), the UK (1 study) and the US (1 study) suggested that women were interested in web-based learning as it would offer a longer-term support system. The information would need to be provided by a reputable organisation, for example the NHS. Online chat or forums were desirable, where women could post their queries at any time of the day.
- Sub-theme 4.9. Through media. Very low quality evidence from 1 study from the US reported that whilst TV and magazines are an easy way to disseminate information to a large proportion of women, women find it hard to trust the media, it can raise unnecessary fears and there is typically too much information already out there. Whilst adverts may increase awareness about causal links to a child's illness and medication taken during pregnancy, those depending on such medications find them too upsetting to watch.

#### Subgroup - younger women (19 years or younger)

• Very low quality evidence from 1 study from the US relating to receiving information from text messages for younger women (19 years or younger). Women felt that texting is a flexible, accessible and familiar method of communication. Information given via text message is easily stored, can be forwarded on to friends/family and can be referred to at a later date.

#### Theme 5. Consistency of information

• **Sub-theme 1. Being given consistent advice.** Low quality evidence from 2 studies from the UK (1 study) and from Sweden (1 study) indicated that women wished to receive consistent advice from all healthcare professionals. Women experienced inconsistent and conflicting advice generally, and especially in hospital. Inconsistency in advice left women feeling staff were not well-informed and that they would benefit from an update of their knowledge.

#### Theme 6. Who delivers the information

- **Sub-theme 6.1. Women with direct experience**. Low quality evidence from 2 studies from the UK (1 study) and the US (1 study) showed that women felt that information was more valuable and relatable when given by women who had experienced pregnancy and had children.
- Sub-theme 6.2. Health professionals. Low quality evidence from 2 UK studies showed that women held health professionals in high regard and would prefer to receive information from them rather than the internet. They also felt that a reminder of information from health professionals would help keep them on track particularly for healthy eating behaviour changes. However, women found that health visitors do not always have the time for their queries.

#### Theme 7. Communication skills of the person delivering information

• **Sub-theme 7.1. Need for clarity.** Low quality evidence from 1 study from Sweden indicated that women wanted information, advice and explanations to be given in a clear manner so they can easily understand the message.

#### Theme 8. Location of information sessions

• **Sub-theme 8.1 Convenient locations.** Low quality evidence from 2 studies from the UK (1 study) and Singapore (1 study) showed that women wished for information to be delivered in a location that was convenient to them. The preferred location differed depending on the type of information being offered. If away from the home, a childcare service would be required. If within the first month postpartum, at home was preferred.

#### **Economic evidence statements**

No economic evidence was identified which was applicable to this review question.

#### The committee's discussion of the evidence

#### Interpreting the evidence

#### The outcomes that matter most

This review focused on the way in which information about self-care (including both physical health and emotional well-being) is provided, and the timing of information provision. 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 about the postnatal health of the woman included:

- Preferences on whether specific information should be provided before or after transfer to community care
- Level of detail in relation to potential complications
- Woman's preferences in relation to receiving specific information privately or together with partner
- Format of information provision (for example, using videos)
- Consistency of information

- Modality of birth
- Healthcare professional delivering the information
- Communication skills of the person providing the information
- Setting in which information is delivered

The evidence review provided data relating to all the suggested themes set out in the protocol except for modality of birth.

#### The quality of the evidence

The evidence was assessed using GRADE-CERQual methodology and the overall confidence in the review findings were very low to low.

Concerns about relevance for the context and population of interest to this guideline ranged from serious to moderate; for the majority of review findings concerns were moderate. The most common concern was related to the transferability of findings to ethnic minorities; in 11 studies the population was either all or mostly white (these include the 3 studies on young women); four studies did not report ethnicity data; only 1 study focussed specifically on ethnic minorities. Concerns about coherence ranged from moderate to minor; for the majority of review findings concerns were minor, as there were no data that contradicted these findings nor were there ambiguous data. Where findings were downgraded for coherence, the data were contradictory in the sense of there being different preferences, rather than being ambiguous. Concerns about adequacy ranged from serious to minor; for the majority of review findings concerns occurred when the study on a text-message intervention provided the information, as this study reported how women found receiving information through text messages as opposed to their opinion on different information provision formats. The number of studies used for each review finding ranged from 1 to 5. Despite these concerns with the evidence that was identified, the committee felt that it was consistent with their clinical experience

#### **Benefits and harms**

The committee agreed that one of the key principles of care in the postnatal period is to listen to the women and be responsive to their needs and preferences. For example, the woman's concerns about her or her baby's condition should be taken seriously. The importance of listening to the women was also highlighted in the recent Ockenden report on maternity services at the Shrewsbury and Telford hospital NHS trust. Furthermore, the committee were aware of the disproportionate maternal and neonatal mortality rates among women and babies from Black, Asian and minority ethnic backgrounds and those living in deprived areas, as highlighted by the 2020 MBRRACE-UK reports on maternal mortality and perinatal mortality. Black women in particular had a more than a four-fold risk of death during pregnancy, childbirth and up to 6 weeks after birth compared with white women. Asian women had a 2-fold risk compared to white women. It should be noted that 'Asian' ethnicity appears to be largely South Asian ethnicity. 'Chinese' ethnicity was analysed separately and showed no difference in maternal mortality compared to white women. Women living in the most deprived areas were almost 3 times more likely to die compared with women living in the least deprived areas. Neonatal mortality rates are also significantly higher in babies of black or Asian ethnicity compared to white babies. Neonatal mortality rates increased the more deprived the area where the mother lives is. The committee discussed that healthcare professionals caring for women and babies should be aware of the increases risk of mortality in these groups. The reasons and mechanisms behind these disparities are complex and likely related to wider societal issues and inequalities. However, in clinical practice, it is important to recognise that the increased risk indicates

that closer monitoring and lower threshold for further care or admission may be needed. Future research could explore the mechanisms underlying these disparities and which interventions could improve the outcomes.

The committee discussed the importance of the partner and family in supporting the woman in the postnatal period and what a positive impact a partner's involvement and support can have on the wellbeing of the mother and the baby. However, they also discussed that it is up to the woman who she wants to involve and committee recognised the various different family situations and arrangements that exist and acknowledged that some women live in a situation where they do not wish to involve their partners. The committee agreed that the healthcare professionals should involve the woman's partner (who could be the baby's father, her partner, family member or friend, or anyone she feels supported by) according to her wishes. However, the committee also recognised that involvement in the woman's care and the baby's care are different because those with parental responsibility of the baby have the right to be involved in the baby's care if they so choose or wish.

The committee discussed the harms identified in the evidence, which seem to result from the poor provision of information. Inconsistency in terms of information content was the primary concern, given that it leads to the woman feeling confused about her postnatal health. From the committees experience it may also reduce women's trust in the health care system and as a consequence may lead to poor self-care and in extreme cases, an increase in maternal morbidity. In addition to the information provided by health professionals, women increasingly have access to a range of information sources for example internet and social networks that provide information which may or may not be evidence based. A further harm resulting from poor communication of information was women not understanding the information they were receiving. The committee therefore made a recommendation to attempt to avoid some of these problems. They recommended some general principles around information sharing, namely that the mode of delivery, timing and content should be tailored to the woman's preferences and that clear language should be used.

They also drew on the evidence to set out a number of other principles which should underpin the provision of information. For example, information should be evidence-based, consistent and offered in face to face discussion as well as in a suitable written format, which was on the basis that although they value face to face interaction, women also often want to be able to refer back to written information as and when it becomes relevant. The committee also recognised the potential importance of virtual or telephone contacts in addition to face to face contacts. Although none of the review findings specifically demonstrated the importance of information being provided in a supportive and respectful way, the committee agreed it was a fundamental point to make because it would increase the likelihood of a positive interaction between professionals and women and also the likelihood of the information being retained and acted on. The committee also discussed how each woman's home, family circumstances and support network will be different, and how it should be up to the woman who she wants to be involve in her postnatal care. Finally, the committee also noted an absence of evidence about the role of interpretation services in the provision of information but agreed it was an essential consideration, particularly to promote equality of access to vital health messages. Aware of a related NICE guideline with recommendations about the provision of information to support shared decision making, the committee signposted to this [CG138] as well as the NHS Accessible Information Standard. The evidence presented in this review, which highlighted the value women place on being able to ask questions highlighted, in the committee's opinion, the importance of information provision being a dialogue rather than something simply 'given' to women. They therefore recommended that healthcare professionals provide regular opportunities for women to ask questions and discuss concerns and to also take time to ensure the information has been clearly understood.

The committee were aware of the NICE guideline on pregnancy and complex social factors [CG110] which covers various considerations during pregnancy for women who misuse substances, young women under 20 years old, women who experience domestic abuse and women who are recent migrants, asylum seekers or refugees, or women who have difficulty reading or speaking English. The committee agreed that while the guideline covers antenatal period, the principles can be applied to the postnatal period and therefore cross referred to this guideline in the recommendations.

The committee agreed that these recommendations would achieve clear benefits, encouraging the delivery of timely, person-centred information in a way that would ensure the uptake of the information and greater, evidence based awareness of women's own needs during the postnatal period.

#### Cost-effectiveness and resource use

Providing appropriate information about a woman's health, in a range of formats, to women and, potentially, their partners entails small costs (that is, additional health professional time and cost of materials required to provide information in different formats), although some information is already provided in current practice. However, these recommendations are expected to increase the women's and their partners' confidence in the information provided, so that they are more likely to actively engage with the advice given. In turn, this is expected to reduce the clinical, psychological, social and economic burden of maternal morbidity and mortality to the family and society.

The recommendation aiming at increasing awareness of the need for closer monitoring of women and their babies from black, Asian and minority ethnic backgrounds and those who live in deprived areas due to an increased risk of developing adverse outcomes is expected to have moderate resource implications in terms of health professionals' extra time spent on closer monitoring of these sub-groups; however, it is expected that extra costs associated with monitoring will be offset by benefits from earlier identification of adverse outcomes and earlier intervention, leading to improved health outcomes (reduced mortality and morbidity) in those women and their babies.

#### Other factors the committee took into account

The committee noted that there are potential equality issues relating to literacy, learning disabilities, language and accessibility to healthcare and technology (for example the internet) for some women. Therefore, the committee made recommendations to ensure the provision of information for women is available using a variety of formats and delivered in a way that the women prefers. The committee signposted to the NHS Accessible Information Standard to support these recommendations.

#### References

#### Brown 2014

Brown, S., Brage Hudson, D., Campbell-Grossman, C., Yates, B. C., Health promotion text blasts for minority adolescent mothers, MCN, American Journal of Maternal Child Nursing, 39, 357-62, 2014

#### Haith-Cooper 2018

Haith-Cooper M. Stacey T. Bailey F. Hospital postnatal discharge and sepsis advice: Perspectives of women and midwifery students, British Journal of Midwifery, 26, 248-253, 2018

#### Henshaw 2018

Henshaw, E. J., Cooper, M. A., Jaramillo, M., Lamp, J. M., Jones, A. L., Wood, T. L., "Trying to Figure Out If You're Doing Things Right, and Where to Get the Info": Parents Recall Information and Support Needed During the First 6 weeks Postpartum, Maternal & Child Health Journal, 22, 1668-1675, 2018

#### Olander 2012

Olander, E. K., Atkinson, L., Edmunds, J. K., French, D. P., Promoting healthy eating in pregnancy: what kind of support services do women say they want? Primary health care research & development, 13, 237-243, 2012

#### Persson 2011

Persson, E. K., Fridlund, B., Kvist, L. J., Dykes, A. K., Mothers' sense of security in the first postnatal week: Interview study, Journal of Advanced Nursing, 67, 105-116, 2011

#### Shorey 2019

Shorey, S., Ng, E. D., Evaluation of a Technology-Based Peer-Support Intervention Program for Preventing Postnatal Depression (Part 2): Qualitative Study, Journal of medical Internet research, 21, e12915, 2019

#### Shorey 2018

Shorey S. Yang Y.Y. Dennis C.-L. A mobile health app-based postnatal educational program (home-but not alone): Descriptive qualitative study, Journal of medical Internet research, 20, 2018

#### Shorey 2015

Shorey, S., Chan, S. W. C., Chong, Y. S., He, H. G., Perceptions of primiparas on a postnatal psychoeducation programme: The process evaluation, Midwifery, 31, 155-163, 2015

#### Sundstrom 2016

Sundstrom, B., Mothers "Google It Up:" Extending Communication Channel Behavior in Diffusion of Innovations Theory, Health communication, 31, 91-101, 2016

#### Weckesser 2019

Weckesser A. Farmer N. Dam R. Wilson A. Morton V.H. Morris R.K. Women's perspectives on caesarean section recovery, infection and the PREPS trial: A qualitative pilot study, BMC Pregnancy and Childbirth, 19, 2019

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#### Weston 2014

Weston, C., Anderson, J.L., Internet use in pregnancy, British Journal of Midwifery, 22, 488-493, 2014

# Appendices

### Appendix A – Review protocol

Review protocol for review question: When and how should information be given to mothers and their partners about postnatal health of the mother?

Field (based on PRISMA P)	Contant
Field (based on <u>PRISMA-P)</u>	Content
Review question	When and how should information be given to mothers and their partners about postnatal health of the mother?
Type of review question	Qualitative
Objective of the review	This review aims to determine how and when information should be given to mothers and their partners or relatives about postnatal health of the mother.
Eligibility criteria – population/disease/condition /issue/domain	Women who have given birth (to a singleton, twins or triplets), from the birth of the baby to 8 weeks after birth, and their partners.
	This guideline will focus on women undergoing routine postnatal care, and not on those women undergoing specialist postnatal care pathways. For this reason, the following populations will be excluded (as they represent women who require specialist postnatal care):
	• women admitted to intensive care after labour and birth and women returning to theatre following a caesarean section
	<ul> <li>women experiencing these complications intrapartum: massive obstetric haemorrhage; third and fourth degree tear; caesarean hysterectomy; uterine artery embolisation due to haemorrhage; bladder, ureteric, blood vessel, or bowel injury at Caesarean section; sepsis; venous thromboembolism</li> </ul>
	<ul> <li>women with these complications in pregnancy: gestational diabetes; pre-eclampsia; pregnancy induced hypertension; acute fatty liver of pregnancy</li> </ul>
	<ul> <li>women with pre-existing conditions (for example, type 1 diabetes, type 2 diabetes, essential hypertension; solid organ transplant recipients; renal disease (usually related to hypertension or autoimmune causes); any form of malignancy; sickle cell disease; thalassaemia; cardiac disease; poorly controlled epilepsy; stroke; cerebral venous thrombosis; sub-arachnoid haemorrhage</li> </ul>
	women with severe mental health problems

#### Table 3:Review protocol

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Field (based on PRISMA-P)	Content
	• Healthcare professionals will also be excluded as the committee felt that the views of women and their partners or relatives are more relevant given that this is a question about what recipients of information found helpful.
Eligibility criteria – Phenomenon of interest	<ul> <li>Views and experiences of the way in which information about self-care (including both physical health and emotional well-being) is provided, and the timing of information provision.</li> <li>Themes will be identified from the available literature, but expected themes are: <ul> <li>preferences on whether specific information should be provided before or after transfer to community care</li> <li>level of detail in relation to potential complications</li> <li>woman's preferences in relation to receiving specific information privately or together with partner</li> <li>format of information provision (for example, using videos)</li> <li>consistency of information</li> <li>modality of birth</li> <li>healthcare professional delivering the information</li> <li>communication skills of the person providing the information</li> <li>setting in which information is delivered</li> <li>information about breastfeeding and bottle feeding will be excluded as it will be dealt with in other review questions</li> </ul> </li> </ul>
Eligibility criteria – comparator(s)	Not applicable, qualitative review
Outcomes and prioritisation	Not applicable, qualitative review
Eligibility criteria – study design	<ul> <li>Published full-text papers only</li> <li>Qualitative studies (for example, studies that use interviews, focus groups, or observations)</li> <li>Exclusions: <ul> <li>purely quantitative studies (including surveys reporting only quantitative data)</li> <li>surveys reporting qualitative data</li> <li>studies may be excluded based on data saturation if more comprehensive evidence is available from other studies</li> <li>conference abstracts will not be considered.</li> </ul> </li> </ul>
Other inclusion exclusion criteria	Studies from low- and middle-income countries will be excluded, as the configuration of postnatal care in these countries is likely to differ from that of the NHS.

Provision of information about the postnatal health of women

Field (based on PRISMA-P)	Content
	Studies published before 1982 will be excluded, as the committee was of the opinion that there were significant changes at this time point in women's involvement in their own antenatal and postnatal care, patient choice, and patient empowerment. Since changes from 1982 are likely to have been gradual, a step-wise approach to reviewing the evidence will be implemented: the technical team will review the more recent evidence first and will continue working on a reverse chronological order. If findings are found to be incoherent at any given time point, they technical team will consult with the committee to assess if this is likely to a change in prevalent views. In this case, those studies that represent points of views that are no longer relevant to the current NHS setting will be excluded
Proposed sensitivity/sub- group analysis, or meta- regression	<ul> <li>The following groups will be considered for stratified analyses:</li> <li>young women (19 years or under)</li> <li>women with physical or cognitive disabilities</li> <li>women who have difficulty accessing postnatal care services</li> <li>primiparous versus multiparous women</li> <li>In the presence of incoherence, the following subgroup analyses will be conducted:</li> <li>black and minority ethnic (BME) groups versus non-BME groups</li> <li>non-native English speakers versus native English speakers</li> </ul>
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 the confidence in the findings from a thematic analysis.
Information sources – databases and dates	The following databases will be searched: • CDSR

Field (based on <u>PRISMA-P)</u>	Content
	• DARE
	• Embase
	• EMCare
	HTA Database
	MEDLINE and MEDLINE IN-PROCESS
	Searches will be restricted by:
	• Date limitations: 1982 to 4 <sup>th</sup> December 2019
	English language
	Human studies
	Qualitative/patient concerns
Identify if an update	This systematic review question will update the recommendations in section 1.2 Maternal health of the existing Clinical guideline [CG37] Postnatal care up to 8 weeks after birth:
	Information giving
	1.2.1 At the first postnatal contact, women should be advised of the signs and symptoms of potentially life-threatening conditions (given in table 2) and to contact their healthcare professional immediately or call for emergency help if any signs and symptoms occur. [2006]
	1.2.2 The Department of Health booklet 'Birth to five', which is a guide to parenthood and the first 5 years of a child's life, should be given to all women within 3 days of birth (if it has not been received antenatally). [2006]
	1.2.3 The personal child health record should be given to all women as soon as possible (if it has not been received antenatally) and its use explained. [2006]
	1.2.4 Women should be offered information and reassurance on:
	<ul> <li>the physiological process of recovery after birth (within the first 24 hours)</li> </ul>
	• normal patterns of emotional changes in the postnatal period and that these usually resolve within 10-14 days of giving birth (within 3 days)
	<ul> <li>common health concerns as appropriate (weeks 2-8). [2006]</li> </ul>
Author contacts	National Guideline Alliance https://www.nice.org.uk/guidance/indevelopment/gid-ng10070

Field (based on <u>PRISMA-P)</u>	Content
Highlight if amendment to previous protocol	N/A
Search strategy – for one database	For details please see appendix B of the guideline
Data collection process – forms/duplicate	A standardised evidence table format will be used, and published as appendix D (clinical 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). Economic evidence is not available as this is a qualitative systematic review.
Methods for assessing bias at outcome/study level	Standard study checklists were used to critically appraise individual studies. For details please see section 6.2 of <u>Developing</u> <u>NICE guidelines: the manual</u>
	The risk of bias across all available evidence was evaluated for each outcome 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 <a href="https://www.cerqual.org/">https://www.cerqual.org/</a>
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 <u>Developing NICE guidelines: the manual</u>
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 <u>Developing NICE guidelines: the manual.</u>

Field (based on PRISMA-P)	Content
	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

BME: black and minority ethnic; 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 question: When and how should information be given to mothers and their partners about postnatal health of the mother?

#### **Clinical search**

The search for this topic was last run on 4<sup>th</sup> December 2019.

Database: Emcare, Embase, Medline, Medline Ahead of Print and In-Process & Other Non-Indexed
Citations – 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	(((first time or new) adj mother*) or nullipara* or peri natal* or perinatal* or postbirth or post birth or post birth or post delivery 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	access to information/ or communication/ or computer communication networks/ or consumer health information/ or health education/ or health promotion/ or information dissemination/ or information seeking behaviour/ or internet/ or pamphlets/ or exp patient education as topic/ or posters as topic/ or publications/ or government publications as topic/
8	7 use ppez
9	access to information/ or computer network/ or consumer health information/ or health education/ or health promotion/ or information dissemination/ or information seeking/ or information service/ or internet/ or medical information/ or patient education/ or patient information/ or information/ or publication/
10	9 use emczd, emcr
11	((care giv* or caregive* or carer* or famil* or father* or husband* or mother* or parent* or partner* or user*) adj3 educat*).ti.
12	((care giv* or caregive* or carer* or famil* or father* or husband* or mother* or parent* or partner* or user*) adj3 educat*).ab. /freq=2
13	((care giv* or caregive* or carer* or famil* or father* or husband* or mother* or parent* or partner* or user*) adj3 (advice or informat*)).ti,ab.
14	((app* or booklet* or brochure* or dvd* or handout* or ict or internet* or leaflet* or manual* or media or online* or pamphlet* or phone or publication* or telephone or video* or web based or web page* or web site* or webpage* or website* or written) adj5 (informat* or educat*)).ti,ab.
15	((care giv* or caregive* or carer* or famil* or father* or husband* or mother* or parent* or partner* or user*) adj5 (app* or booklet* or brochure* or dvd* or handout* or ict or internet* or leaflet* or manual* or media or online* or pamphlet* or phone or publication* or telephone or video* or web based or web page* or web site* or webpage* or website* or written)).ti,ab.
16	(informat* adj3 (access* or dissem* or model* or need* or program* or provision or requir* or seek* or shar*)).ti,ab.
17	(informat* adj3 (provid* or provision)).ti.

Provision of information about the postnatal health of women

#	Search					
	((informat* or advice) adj3 (provision or provid*)).ab. and informat*.ab. /freq=2					
19	(informat* adj3 (accurat* or barrier* or benefi* or clear* or facilita* or help* or hinder* or hindran* or practical* or support*)).ti,ab.					
20	(informat* adj3 (content* or method* or quality or type*)).ti,ab.					
21	((added or additional or extra or further) adj3 informat*).ti,ab.					
22	((prompt* or time* or timing or when) adj3 informat*).ti,ab.					
23	((gave or give* or giving or receive*) adj3 (advice or informat*)).ti,ab.					
24	(informat* adj3 (contact* or emergency care or hospital* or red flag* or resource* or service*)).ti,ab.					
25	patient education handout.pt.					
26	(patient care planning/ or critical pathway/ or clinical protocols/) and information*.ti,ab.					
27	26 use ppez					
28	(informat* adj3 (care plan* or pathway* or protocol*)).ti,ab.					
29	communication barriers/ use ppez					
30	((communicat* or language*) adj3 (barrier* or facilitat*)).ti,ab.					
31	(communicat* adj3 (bad* or difficult* effect* or encourag* or good or help* or ineffect* or in-effect* or poor* or prevent* or unhelp* or un help*)).ti,ab.					
32	(communicat* adj3 (initiate* or timing* or time*)).ti,ab.					
33	translating/ use ppez or "translating (language)"/ use emczd, emcr					
34	(translat* adj7 (communicat* or informat* or language*)).ti,ab.					
35	((care giv* or caregiver* carer* or famil* or father* or husband* or mother* or parent* or partner* or user*) adj3 (advice or informat*)).ab.					
36	health information.tw.					
37	*patient care planning/ or *clinical pathway/ or *clinical protocols/					
38	37 use emczd, emcr					
39	patient care planning/ or critical pathway/ or clinical protocols/					
40	39 use ppez					
41	informat*.ti,ab.					
42	(or/38,40) and 41					
43	informat*.ti. or ((advice* or information* or support*) adj5 (selfcare* or self care or selfmanag* or self manag* or selfinstruct* or self instruct* or selfmonitor* or self monitor*)).ti,ab.					
44	or/8,10-25,27-36,42-43					
45	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/					
46	45 use emczd, emcr					
47	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/ or observation/ or personal narratives as topic/ or narrative/ or qualitative research/ or "surveys and questionnaires"/ or sampling studies/ or tape recording/ or videodisc recording/					
48	47 use ppez					

#	Search				
49	group*.ti,ab.				
50	(qualitative* or interview* or focus or questionnaire* or narrative* or narration* or survey*).ti,ab.				
51	(ethno* or emic or etic or phenomenolog* or grounded theory or constant compar* or (thematic adj4 analys*) or theoretical sampl* or purposive sampl*).tw.				
52	(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.				
53	(metasynthes* or meta-synthes* or metasummar* or meta-summar* or metastud* or meta-stud* or meta-them*).tw.				
54	(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.				
55	((brother* or famil* or father* or husband* or mother* or partner* or patient* or relative* or sibling* or sister* or spous* or consumer* or mother* or parent* 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.				
56	((carer* or caregiv* or care giv*) 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.				
57	((doctor* or gp or health visitor* or coordinator* or midwiv* or midwif* or nurs* or obstetrician* or pediatrician* or paediatrician* or officer* or personal assistant* or physiotherapist* or practitioner* or professional* or worker*) 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.				
58	or/46,48-54				
59	or/55-57				
60	or/58-59				
61	6 and 44 and 60				
62	limit 61 to english language				
63	limit 62 to yr="1982 -current"				
64	(conference abstract or letter).pt.				
65	(editorial or note).pt. or case report/ or case study/ or letter/				
66	(or/64-65) use emczd, emcr				
67	letter/ or editorial/ or news/ or historical article/ or anecdotes as topic/ or comment/ or case reports/				
68	67 use ppez				
69	(letter or comment* or abstracts).ti.				
70	or/66,68-69				
71	randomized controlled trial/ use ppez, emczd				
72	random*.ti,ab.				
73	or/71-72				
74	70 not 73				

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#	Search
75	(animals/ not humans/) or exp animals, laboratory/ or exp animal experimentation/ or exp models, animal/ or exp rodentia/
76	75 use ppez
77	(animal/ not human/) or nonhuman/ or exp animal experiment/ or exp experimental animal/ or animal model/ or exp rodent/
78	77 use emczd, emcr
79	(rat or rats or mouse or mice).ti.
80	or/74,76,78-79
81	63 not 80

#### Database: CDSR (global) [Wiley]

#	Search
#1	mesh descriptor: [postpartum period] explode all trees
#2	mesh descriptor: [peripartum period] this term only
#3	mesh descriptor: [postnatal care] this term only
#4	(((("first time" or new) near/1 mother*) or 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*) near/2 birth*))):ti,ab,kw
#5	#1 or #2 or #3 or #4

#### Database: DARE, HTA (global) [CRD Web]

#	Search				
1	mesh descriptor postpartum period in dare,hta				
2	mesh descriptor peripartum period in dare,hta				
3	mesh descriptor postnatal care in dare,hta				
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 dare, hta				
5	#1 or #2 or #3 or #4				
6	mesh descriptor breast feeding explode all trees in dare,hta				
7	mesh descriptor lactation in dare,hta				
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 dare, hta				
9	#6 or #7 or #8				
10	mesh descriptor bottle feeding in dare,hta				
11	mesh descriptor infant formula in dare,hta				
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				

#	Search
	formulafeed 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 dare, hta
13	#10 or #11 or #12
14	#5 or #9 or #13

#### Health economic search

The search for this topic was last run on 5<sup>th</sup> December 2019.

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

4 3 use ppez	iod/ or postnatal care/ rtum period/ or postnatal care/				
3postpartum period/ or peripa43 use ppez	rtum period/ or postnatal care/				
4 3 use ppez	rtum period/ or postnatal care/				
•••					
5 (nullipara* or peri natal* or p	3 use ppez				
delivery or postnatal* or post	(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 feed	ing education/ or lactation/				
8 7 use emczd, emcr					
9 exp breast feeding/ or lactation	on/				
10 9 use ppez					
breast milk or expressed milk	(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	or/8,10-11				
13 artificial food/ or bottle feedin	artificial food/ or bottle feeding/ or infant feeding/				
14 13 use emczd, emcr					
15 bottle feeding/ or infant form	ula/				
16 15 use ppez					
(artificial adj (formula or milk (substitut* or supplement*)) of formula) adj supplement) or f ((baby or babies or infant* or formulafeed or formulated or	tic) adj2 (artificial or fed or feed* or infant* or milk*)) or c)) or bottlefed or bottlefeed or cup feeding or (milk adj2 or ((infant or milk or water or glucose or dextrose or formula supplement* or supplement feed or milk feed or neonate* or newborn*) adj (formula* or milk)) or (milk adj2 powder*) or hydrolyzed formula* or adj bottle*) or infant feeding or bottle nipple* or milk				
18 or/14,16-17					
19 or/6,12,18					
20 budget/ or exp economic eval or health economics/	uation/ or exp fee/ or funding/ or exp health care cost/				
21 20 use emczd, emcr					

#	Search					
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 quol* or euroquol* or euro quol5d* or euroquol5d* 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 5 dimension* or 5 domain* or 5 domain*)).tw.					
36	(hui or hui2 or hui3).tw.					
37	(illness state* or health state*).tw.					
38	(multiattibute* 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					

#### Provision of information about the postnatal health of women

#	Search		
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		

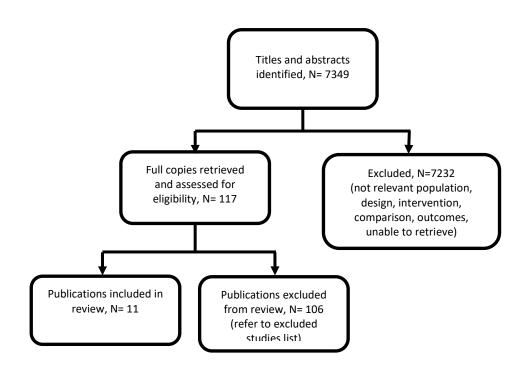
#### Database: HTA, NHS EED (global) [CRD Web]

#	Search				
1	mesh descriptor postpartum period in hta, nhs eed				
2	mesh descriptor peripartum period in hta, nhs eed				
3	mesh descriptor postnatal care 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*)) hta, nhs eed				
5	#1 or #2 or #3 or #4				
6	mesh descriptor breast feeding explode all trees hta, nhs eed				
7	mesh descriptor lactation 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*))) hta, nhs eed				
9	#6 or #7 or #8				
10	mesh descriptor bottle feeding hta, nhs eed				
11	mesh descriptor infant formula 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 formulafeed 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*)) hta, nhs eed				
13	#10 or #11 or #12				
14	#5 or #9 or #13				

### Appendix C – Clinical evidence study selection

# Study selection for: When and how should information be given to mothers and their partners about postnatal health of the mother?

Figure 1: Study selection flow chart



## Appendix D – Clinical evidence tables

Evidence tables for review question: When and how should information be given to mothers and their partners about postnatal health of the mother?

#### Table 4: Evidence tables

Study Details	Participants	Methods	Findings	Comments
<ul> <li>Full citation</li> <li>Brown, S., Brage Hudson, D., Campbell-Grossman, C., Yates, B. C., Health promotion text blasts for minority adolescent mothers, MCN, American Journal of Maternal Child Nursing, 39, 357-62, 2014</li> <li>Ref Id 431284</li> <li>Study type Qualitative - evaluating an intervention</li> <li>Aim of the study</li> <li>To examine use of technology for delivering a health promotion intervention via text blasts in single, low-income, adolescent, minority mothers and to describe their perceptions and experiences with the intervention.</li> </ul>	Sample size 5 postpartum adolescents Characteristics Age: mean 18.2, SD 0.84, range 17-19 years Education: n=4 high school education, n=1 taking classes to complete high school Ethnicity: n=3 African American; n=2 Hispanic Inclusion criteria Adolescents between 13 and 19 years of age, who owned a cell phone with text messaging capabilities and current cell phone service. Exclusion criteria Women who were younger than 13 and older than 19 and those with-out the required cell phone and service.	Setting Women attending a Special Supplemental Nutrition Program for Women, Infants and Children (WIC) program in a Midwestern state Sample selection A purposive convenience sampling method was used to recruit postpartum adolescents through verbal presentations, fliers posted at the WIC centres describing the study, and through verbal reminders presented by participants' WIC mentors. Data collection Semi-structured interviews were used to collect data about postpartum adolescents' perceptions of the health promotion intervention. Individual face-to-face interviews were done monthly	Findings reported in the study Preferred mode of receiving healthcare information Adolescent women found the cell phone blasts a good methodological fit with their learning styles and to receive information through cell phone messages was not a foreign approach. It was apparent that using the phone and texting are a method that is readily available, convenient and allows for flexibility for the women.	Limitations (assessed using the CASP checklist for qualitative studies): Aims and qualitative methodology: Aim of the study was clearly reported. Research design was appropriate for answering the research question. Research design: The authors do not justify the methods used. Recruitment strategy: Sample selection was clearly reported Data collection: There is a clear description of how interviews were conducted. Saturation of data was not achieved due to the small sample size (n=5). Relationship between researcher and participants:

Study Details	Participants	Methods	Findings	Comments
Country/ies where the study was carried out US Study dates Not reported Source of funding The authors declare they have no conflicts of interest		during the 6-month intervention. Nominal data were collected about the mothers' use of breast milk, adherence with childhood immunisations, and adherence with maternal and infant follow-up appointments. The interview guide asked participants to describe their perceptions of the intervention and how the intervention had affected their health behaviour or the health of the infant, and to describe their perceptions and experiences with the text blasts. Participants' responses were probed during interviews for clarification. Interviews were audiotaped and later transcribed verbatim. Observations of participants were recorded as field notes following interviews.		The authors do not discuss the potential influences of the interviewers. Ethical issues: Approval for the study was obtained from the university's Institutional Review Board prior to implementation of the study. Data analysis: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were not discussed by the authors.
		Data analysis Typed interview transcripts were read in order to acquire a sense of the whole. The initial large amount of text was reviewed to begin the coding of concepts; these concepts were organised into categories to create nodes through the		<b>Findings:</b> In relation to the credibility of the findings, transcripts, coding results and discussions were held between all members of the research team. The authors do not discuss the transferability of the findings to other populations. The authors

Study Details	Participants	Methods	Findings	Comments
		NVivo 8 analysis program. This program was used to sift through and summarise codes by way of sorting, so similar statements appeared together (nodes). These nodes were analysed for similarities, connections, and relationships.		provided some discussion of the findings. Value of research: They do not discuss the implications of their findings for policy and practice but do identify areas where future research is needed. Overall methodological concerns: Moderate
Full citation Haith-Cooper M. Stacey T. Bailey F. Hospital postnatal discharge and sepsis advice: Perspectives of women and midwifery students, British Journal of Midwifery, 26, 248- 253, 2018 Ref Id 1164312 Study type Qualitative Aim of the study To explore the perceptions of women and senior student midwives related to the postnatal hospital discharge	Sample size N=23 n=9 third-year student midwives (data not relevant to this review) n=9 women who had given birth in the past year, (had paid for National Childbirth Trust (NCT) parent education classes, and who were attending a postnatal support group) n=5 vulnerable migrant women who had given birth in the past year, (who were attending a specialist NCT-funded postnatal support group) Characteristics Not reported	<ul> <li>Setting Not reported</li> <li>Sample selection A purposive sample of participants was recruited to ensure a broad socioeconomic, ethnic and cultural background: <ul> <li>Student midwives, as they had recent experience of the entire maternity journey (data not relevant for this review)</li> <li>Women who had given birth in the past year, had paid for National Childbirth Trust (NCT) parent</li> </ul></li></ul>	Findings reported in the study It's all a rush Women felt the quality of the information they received at the postnatal discharge was affected by the midwives rushing. This in turn lead women to worry if they had all the relevant information. However, it was also acknowledged that some women just wanted to get home, and so they themselves rushed through the discharge, not taking full advantage of the information provided. Too much to remember Women felt that there was too much verbal information being	Limitations (assessed using the CASP checklist for qualitative studies): Aims and qualitative methodology: Aim of the study was clearly reported. Research design was appropriate for answering the research question. Research design: The authors do not justify the methods used Recruitment strategy: Sample selection was not reported Data collection: There is some description of how interviews

Study Details	Participants	Methods	Findings	Comments
process and maternal sepsis prevention advice. Country/ies where the study was carried out UK Study dates Not reported Source of funding Translate, Leeds City Region	Inclusion criteria None reported Exclusion criteria None reported	<ul> <li>who were attending a postnatal support group</li> <li>Vulnerable migrant women who had given birth in the past year, and who were attending a specialist NCT-funded postnatal support group</li> <li>Women were recruited through their NCT groups</li> <li>Data collection         <ul> <li>One-hour focus groups, one focus group for each population group.</li> <li>Questions focused on postnatal discharge both generally and specifically related to sepsis Focus groups were audio recorded and transcribed verbatim</li> </ul> </li> <li>Data analysis         <ul> <li>Thematic analysis was used in Microsoft Word and with colour-coding. Transcripts were read and reread, coded, and themes derived from the grouping of</li> </ul> </li> </ul>	provided at discharge for them to remember specific details, particularly in relation to infections and sepsis. Lack of consistency Women reported a lack of consistency with the information provided to them. Some women received verbal information with leaflets to reinforce the message, other women were just given (too many) leaflets that ended up not being read Women did not appear to know the seriousness of sepsis. This could have been because of an inconsistency in the way that sepsis was (or was not) talked about at the postnatal discharge. The words used to describe sepsis included flu-like symptoms, localised infection or feeling under the weather. Blood poisoning was not reported to have been used generally. Women received advice about sepsis at different time points across their maternity journey, ranging from booking appointments to the first or second postnatal visit.	<ul> <li>were conducted. Saturation of data was not discussed.</li> <li>Relationship between researcher and participants: The authors do not discuss the potential influences of the interviewers.</li> <li>Ethical issues: Approval for the study was obtained from the university's Institutional Review Board prior to implementation of the study.</li> <li>Data analysis: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The analytical process was described and the use of predefined methods from the literature was mentioned. It is somewhat clear how categories were identified. Contradictory data were not discussed by the authors.</li> <li>Findings: In relation to the credibility of the findings, all themes were discussed with</li> </ul>

Study Details	Participants	Methods	Findings	Comments
		codes coding. Themes were discussed by the research team to ensure they were true to the data.		the research team. The authors do not discuss the transferability of the findings to the wider NHS setting. The authors provided some discussion of the findings. <b>Value of research:</b> They do discuss the implications of their findings for policy and practice but do identify areas where future research is needed. <b>Overall methodological concerns:</b> Moderate
Full citation Henshaw, E. J., Cooper, M. A., Jaramillo, M., Lamp, J. M., Jones, A. L., Wood, T. L., "Trying to Figure Out If You're Doing Things Right, and Where to Get the Info": Parents Recall Information and Support Needed During the First 6 weeks Postpartum, Maternal & Child Health Journal, 22, 1668- 1675, 2018 Ref Id	Sample size N=33 n=26 mothers n=6 partners n=1 sister Characteristics Number of children: 54% one child, 38% >1 child, 8% not reported Race: 77% White, 15% African American, 8% Hispanic	Setting Not reported Sample selection Flyers in doctor's offices, public locations and Facebook were used to advertise and recruit participants. From the n=106 parents who expressed an interest, participants were purposefully selected to maximise diversity (for income, education and race)	Findings reported in the study I didn't know enough about my physical recovery Women reporting not being able to recall any of the information being given to them in the hospital. They wanted more information than what was given to them in pamphlets. From this we can infer time in the hospital is not the most appropriate time to give information about the	Limitations (assessed using the CASP checklist for qualitative studies): Aims and qualitative methodology: Aim of the study was clearly reported. Research design was appropriate for answering the research question. Research design: The authors justify the methods used

Study Details	Participants	Methods	Findings	Comments
986284 Study type Qualitative Aim of the study To explore parents' experiences adjusting to the parenting role during the first 6 weeks postpartum and to elicit from parents where and how they sought support and information during the early postpartum period, and what hindered this process. Country/ies where the study was carried out	Income: 39% Low, 42% Middle, 19% High Education: 11% high school/GED, 27% some college, 31% 4 year college, 31% graduate degree Relationship status: 4% single, 15% live with partner, 81% married Inclusion criteria Able to speak English Have an infant or toddler under two Exclusion criteria None reported	Data collection Five focus groups were used for data collection. Focus groups were formed with similarities with at least one demographic factor to the other participants. Partners of participants were invited to take part. Focus groups were held at a private hospital with groups of 4-10 people. Each focus group lasted between 80-105 minutes. Data collection included audio recording, field notes, and participant notebook recordings, sessions were transcribed verbatim. Interview guide questions were used. Data saturation was achieved	mother's physical recovery. Women felt underprepared for the physical changes such as bleeding, cramping, constipation and wound care. I didn't know enough about my mental health Most women recalled being given some information on postpartum depression, however some found it inadequate	Recruitment strategy: Sample selection was clearly reported Data collection: There is a clear description of how interviews were conducted. Saturation of data was achieved. Relationship between researcher and participants: The authors do discuss the potential influences of the interviewers. Ethical issues: Approval for the study was obtained from the university's and hospital's Institutional Review Board prior to implementation of the study.
US <b>Study dates</b> April 2016 <b>Source of funding</b> Funded by Denison University Research Foundation.		Data analysis Constant comparison iterative thematic analysis techniques were used. The research group all individually read the transcripts, produced data- derived code descriptions before coming together to discuss and integrate the codes. Codes were further		Data analysis: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were

Study Details	Participants	Methods	Findings	Comments
		revised and discussed until consensus was achieved.		<ul> <li>identified. Contradictory data were discussed by the authors.</li> <li>Findings: In relation to the credibility of the findings, transcripts, coding results and discussions were held between all members of the research team. The authors do not discuss the transferability of the findings to the wider NHS setting. The authors provided some discussion of the findings.</li> <li>Value of research: They do not discuss the implications of their findings for policy and practice but do identify areas where future research is needed.</li> <li>Overall methodological concerns: Moderate</li> </ul>
Full citation Olander, E. K., Atkinson, L., Edmunds, J. K., French, D. P., Promoting healthy eating in pregnancy: what kind of support services do women say	Sample size Two focus groups of postnatal women (N=14) Also, two focus groups of prenatal women (N=9), their data is not reported as not	<b>Setting</b> Deprived area in the Midlands of England (ranked 108 from 326, where 1 is the most deprived).	Findings reported in the study Early information leading to routine formation of healthier eating habits	Limitations (assessed using the CASP checklist for qualitative studies): Aims and qualitative
they want? Primary health care	relevant to this question	Sample selection	Pregnancy is a time of change: Women wanted to be	methodology: Aim of the study was clearly reported. Research

Study Details	Participants	Methods	Findings	Comments
research & development, 13, 237-243, 2012	<b>Characteristics</b> None reported - funders of the project insisted on anonymity for participants, therefore none	Participants were recruited by their midwives or through the research team at three children's centres.	offered healthy eating support in pregnancy. Healthy eating is a behaviour change that needed to be learnt in	design was appropriate for answering the research question.
Ref Id 822999 Study type Qualitative Aim of the study To explore what type of healthy eating services and support prenatal and postnatal women want	collected. Researchers observations indicate that women were of different parity and weight status. Most women were white British and varied in age from 18 to ~30 years. Inclusion criteria None reported	Data collection Semi-structured focus groups using open-ended questions to stimulate discussion. Probes were used to address specific issues regarding what support the women want regarding improving their healthy eating.	pregnancy and so the new routine could be established before the baby arrived. <b>More time prenatally becomes</b> <b>less time postnatally:</b> Women reported they would have more time to eat healthily and attend a service during pregnancy compared with after birth when taking care of their baby would take up most of	Research design: The authors do not justify the methods usedRecruitment strategy: Sample selection was clearly reportedData collection: There is a clear description of how interviews were conducted. Saturation of
Country/ies where the study was carried out England, UK Study dates Not reported Source of funding Nuneaton and Bedworth Borough Council	Exclusion criteria None reported	Data analysis Transcribed verbatim and thematic analysis used for identification of repeated patterns of meaning across all data sets.	their time. The delivery of practical sessions to increase information Practical sessions to increase information: Women wanted practical sessions where they could be shown how to improve their diet and how to cook healthy foods. Women thought practical sessions would be better than receiving leaflets describing how to cook healthy food. Local services delivered by mothers: Women wanted the practical sessions to be run by	data not discussed.  Relationship between researcher and participants: The authors do discuss the potential influences of the interviewers.  Ethical issues: Approval for the study was obtained from the university's Institutional Review Board prior to implementation of the study.  Data analysis: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were

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Study Details	Participants	Methods	Findings	Comments
			women who had experienced pregnancy and had children. It was felt these women could best show the participants how to cook inexpensive and quick healthy food. In addition, women wanted these sessions to be held in convenient locations that also offered child care.	clearly distinguished). The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were not discussed by the authors.
			Alternatives regarding healthy eating support must be offered: Women preferred group sessions over individual sessions, but felt a choice should be offered. Health professionals providing support and signposting to services	<b>Findings:</b> In relation to the credibility of the findings, a second researcher read all transcripts and reviewed all themes. The authors do not discuss the transferability of the findings to other populations. The authors provided some discussion of the findings.
			Health professionals providing healthy eating support: Women felt health eating information could also be provided by their midwife or other health professionals. This support would help the women remember to eat more healthily. Health professionals in a signposting role: Women felt that signposting to healthy eating service from a midwife	<ul> <li>Value of research: They do discuss the implications of their findings for policy and practice and identify areas where future research is needed.</li> <li>Overall methodological concerns: Moderate</li> </ul>

Study Details	Participants	Methods	Findings	Comments
			would be effective, as most women listen to their midwives recommends.	
Full citationPersson, E. K., Fridlund, B., Kvist, L. J., Dykes, A. K., Mothers' sense of security in the first postnatal week: Interview study, Journal of Advanced Nursing, 67, 105- 116, 2011Ref Id 	Sample size N=14 Characteristics Age: Range 23 to 33 years Education: n=8 University/college, n=5 Upper secondary, n=1 sixth-form college One child: n=11; two children: n=3 Inclusion criteria Given birth to a live, full-term baby (≥37 gestational weeks) and spoke Swedish. Exclusion criteria Not reported	Setting Southern Sweden, including five different postnatal wards in two different towns and three different small villages Sample selection Participants were recruited from five 'Preparation for Childhood' groups, one antenatal unit and one postnatal ward. Data collection Interviews 1, 3 and 6 were focus group discussions with five, three and two respondents, respectively whilst interviews 2, 4, 5 and 7 were individual interviews. Data analysis All interviews were audiotaped and transcribed interview was initially read thoroughly and notes were taken to bring out the character of the text, in	Findings reported in the study Support from staff Being given relevant information: Women wanted information, advice and explanations to be given in a clear and understandable manner. They also wanted the information to be consistent from all staff. Women also wanted to talk with the midwife after delivery. Being prepared for the time after birth: Women wanted to be prepared before the birth and felt staff should provide information about the time after birth. Common problems during the early postnatal days should be addressed by midwives during antenatal parenthood classes as particularly first time mothers would not know what questions to ask. Women wanted to know more about what to expect, women would worry about things they	<ul> <li>Limitations <ul> <li>(assessed using the CASP</li> <li>checklist for qualitative</li> <li>studies):</li> </ul> </li> <li>Aims and qualitative methodology: Aim of the study was clearly reported. Research design was appropriate for answering the research question.</li> <li>Research design: The authors do not justify the methods used</li> <li>Recruitment strategy: Sample selection was clearly reported</li> <li>Data collection: There is a clear description of how interviews were conducted. Saturation of data met and discussed.</li> <li>Relationship between researcher and participants: The authors do not discuss the potential influences of the</li> </ul>

Study Details	Participants	Methods	Findings	Comments
Source of funding Milk Drop, Helsingborg, Sweden (a non-profit organisation for the improvement of infant and child health) The Solstickan Foundation, Stockholm, Sweden (aims to improve the health and welfare of children in Sweden) Lund University, Medical Faculty, Lund, Sweden		accordance with qualitative thematic content analysis. All aspects of the content were categorised using the method of open coding.	<ul> <li>now saw as 'very small problems', which could have been avoided if they had known that the 'small problem' was not unusual. Accordingly, both spoken and written information were asked for:</li> <li>Capacity and health of the woman and the baby</li> <li>Being assured that her own physical health was good: Women also wished to be examined themselves before leaving hospital and shortly after coming home as their bodies had experienced big changes and typically the focus was on the baby.</li> </ul>	<ul> <li>interviewers other than that data collection was carried out by two authors.</li> <li>Ethical issues: Approval for the study was obtained from the appropriate ethics committee and managers responsible for departments of the study.</li> <li>Data analysis: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were not discussed by the authors.</li> <li>Findings: In relation to the credibility of the findings, a second researcher read all transcripts and reviewed all themes. The authors do not discuss the transferability of the findings to other populations. The authors</li> </ul>

			provided some discussion of the findings. <b>Value of research:</b> They do discuss the implications of their findings for policy and practice but the identification of areas where future research is needed is very limited.
			Overall methodological concerns: Minor
trol group ervention Sample se Women r looking at supportiv 1 years parenting dian, 3/16 mHealth a ese, 1/16 phone-ba sessions ( yes, 4/16 no postnatal ttended: 4/16 invited im completic	election ecruited from a RCT t a technology-based e educational gprogram (SEPP) - the app and additional sed educational wantenatal and ). Women were mediately after the on of the intervention wantentational wantentational mediately after the on of the intervention wantentational wantentati	hancement of the ervention omen valued the information ey received from the health re app (mHealth), and nted access to it longer than nonth postpartum oproximately 3 months to 1 ar). Women also felt the ailability of the app should tend into the prenatal stage, nerwise the mothers are too sy with the baby. nee when the baby comes, en you areengaged in being	Limitations (assessed using the CASP checklist for qualitative studies): Aims and qualitative methodology: Aim of the study was clearly reported. Research design was appropriate for answering the research question. Research design: The authors justify the methods used. Recruitment strategy: Sample selection was clearly reported.
ne S	hese, 1/16 phone-ba sessions ( 5 yes, 4/16 no postnatal attended: 4/16 invited im completic /16 normal (1 month 16 assisted postpartu	hese, 1/16 phone-based educational yea sessions (antenatal and avai 5 yes, 4/16 no postnatal). Women were ext invited immediately after the completion of the intervention but /16 normal (1 month 'Or 16 assisted postpartum). Recruitment the arean section continued until data saturation wit	hese, 1/16 phone-based educational sessions (antenatal and postnatal). Women were invited immediately after the completion of the intervention 16 assisted postpartum). Recruitment (upproximately 5 months to 1 year). Women also felt the availability of the app should extend into the prenatal stage, otherwise the mothers are too busy with the baby. 'Once when the baby comes, then you areengaged in being

Study Details	Participants	Methods	Findings	Comments
To explore the experiences and perceptions of participants in a technology-based supportive educational parenting program (SEPP) Country/ies where the study was carried out Singapore Study dates Not reported Source of funding The National University Health System Clinician Research grant FY2015 (Reference Number: NUHSRO/2016/023/CRG/02) from the National University of Singapore	Confinement period: 13/16 yes, 3/16 no Child order: 10/16 first child, 4/16 second, 2/16 third or more child Inclusion criteria Not reported Exclusion criteria Not reported Not reported	Data collection         Face-to-face semi-structured interviews were conducted at a time and location convenient to the mother. Interviews typically lasted between 30-60 minutes and were audio recorded. Interviews were transcribed verbatim and field notes were taken to note nonverbal cues.         Data analysis         Thematic analysis was conducted independently by two researchers. Transcribed interviews were read multiple times and color-coded to highlight different concepts and generate the initial codes. Related codes were collated to generate subthemes and overarching themes, which were reviewed comprehensively by both researchers. Discrepancies were discussed and clarified until a consensus was achieved.	you are pregnant, you have more time, so you can go through the educational videos or seek expert advice.' (p.7)	<ul> <li>Data collection: There is a clear description of how interviews were conducted. Saturation of data was achieved.</li> <li>Relationship between researcher and participants: The authors do not discuss the potential influences of the interviewers.</li> <li>Ethical issues: Approval for the study was obtained from the National Health Group Domain Specific Review Board of the hospital prior to implementation of the study.</li> <li>Data analysis: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were not discussed by the</li> </ul>

#### Provision of information about the postnatal health of women

Study Details	Participants	Methods	Findings	Comments
				<ul> <li>Findings: In relation to the credibility of the findings transcripts, coding results and discussions were held between two researchers. The authors do not discuss the transferability of the findings to other populations. The authors provided some discussion of the findings.</li> <li>Value of research: They do not discuss the implications of their findings for policy and practice but do identify areas where future research is needed.</li> <li>Overall methodological concerns: Moderate</li> </ul>
Full citation Shorey S. Yang Y.Y. Dennis CL. A mobile health app-based postnatal educational program (home-but not alone): Descriptive qualitative study, Journal of medical Internet research, 20, 2018 Ref Id	Sample size N=17 n=5 couples, n=4 fathers and n=3 mothers Characteristics Age (range): 26-42	Setting Not reported Sample selection Recruited from the intervention group of a RCT. The aim of the RCT was to test the effectiveness of an app- based education program	Findings reported in the study Positive features of the mHealth App Participants found the app a good information resource with user-friendly features, easy to find information that was tailored to their needs and allowed for recap. Parents liked	Limitations (assessed using the CASP checklist for qualitative studies): Aims and qualitative methodology: Aim of the study was clearly reported. Research design was appropriate for

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Study Details	Participants	Methods	Findings	Comments
1164280 Study type	Race: 7/17 (41%) Chinese; 5/17 (29%) Malay; 1/17 (6%) Indian; 4/17 (24%) Other Education: 13/17 (86%) degree	among new parents called mHealth. The mHealth app–based educational program include a	that it contained localised, contextually relevant information. Participants valued being able	answering the research question.
Qualitative study (from the intervention group of a RCT)	holders; 2/17 (12%) diploma; 2/17 (12%) Institute of Technical Education Employment: 16/17 (94%) full-	discussion forum where parents could post photographs or messages and have their questions addressed	to ask the midwife specific questions, this was more valuable than the information that could be found on the	<b>Research design:</b> The authors do not justify the methods used
Aim of the study To explore the views of parents of newborns with regard to the content and delivery of a	time employed Income: 4/17 (24%) monthly income SG \$3000-5999; 8/17 (47%) monthly income SG	by a midwife. Additional resources on the mHealth app included audios, videos, and PDF documents on new born,	web, which was too generic and less trust worthy. Participants found it helpful that the app catered to	<b>Recruitment strategy:</b> Sample selection was somewhat reported
mobile health (mHealth) app– based postnatal educational program	\$6000-9999; 5/17 (29%) monthly income >SG \$10000 Antenatal education: 8/17 (47%) yes; 9/17 (53%) no	maternal, and paternal care. Data collection	different learning styles with pdfs, audio and videos. Recommendations for future	Data collection: There is a clear description of how interviews were conducted. Saturation of data was achieved.
Country/ies where the study was carried out Singapore Study dates	Birth: normal vaginal birth 12/17 (71%); lower segment caesarean section 3/17 (18%); assisted birth 2/17 (12%)	Semi-structured interviews were conducted face-to-face in the participant's home. Participants were invited to take part after 4 weeks of using the mHealth app. Interviews	Participants found there were some technical issues with the app, found it difficult to navigate the chat forums when looking for specific questions, would prefer the app to be accessible for longer (up to 6	Relationship between researcher and participants: The authors do discuss the potential influences of the interviewers.
May to July 2016 Source of funding National University of	Inclusion criteria English speaking new parents from the intervention arm of a RCT	were audio recorded and transcribed verbatim, interviews lasted between 30- 45 minutes.	months), starting in the antenatal period, and with a wider range of educational topics, particularly for the fathers and how they can help.	Ethical issues: Approval for th study was obtained from the National Health Group Domai Specific Review Board of the hospital prior to
Singapore provided a start-up grant	Exclusion criteria None reported	Data analysis Thematic analysis was conducted. Data was prepared for analysis, initial codes were generated using colour-coding		implementation of the study. <b>Data analysis:</b> Results were presented clearly with the generous use of quotes where appropriate (quotes and the

Study Details	Participants	Methods	Findings	Comments
		and then the themes and subthemes were developed. Transcripts of the interviews were examined several times to gain familiarity with the data. Two authors independently analysed the content and developed the codes and themes. The authors reviewed the themes for likeness and differences before deciding overarching themes. The final findings were shared with the participants, who had no further inputs on the themes and subthemes.		researchers' own input were clearly distinguished). The analytical process was described although limited literature mentioned. It is clear how categories were identified. Contradictory data were agreed between authors. Findings: In relation to the credibility of the findings transcripts, coding results and discussions were held between two researchers who had coded up the data independently. The authors do not discuss the transferability of the findings to other populations. The authors provided some discussion of the findings. Value of research: They do not discuss the implications of their findings for policy and practice but do identify areas where future research is needed. Overall methodological concerns: Moderate
Full citation	Sample size	Setting	Findings reported in the study	Limitations

Study Details	Participants	Methods	Findings	Comments
Study Details Shorey, S., Chan, S. W. C., Chong, Y. S., He, H. G., Perceptions of primiparas on a postnatal psychoeducation programme: The process evaluation, Midwifery, 31, 155- 163, 2015 Ref Id 695924 Study type Qualitative - responses to an intervention Aim of the study	Participants N=18 Characteristics Age: mean 29.39 years (SD 3.7), Range 23–39. All mothers were married. Ethnicity: Chinese n=8 (44.4%), Indian n=5 (27.8%), Malay n=3 (16.7%) and Filipino n=2 (11.1%). Education: Degree n=11 (61%), Diploma n=5, Secondary level n=2 Employment status: employed n=11 (66.7%), unemployed n=7 (33.3%)	Women attending postnatal wards of a public tertiary hospital in Singapore. Sample selection Participants were recruited from a randomised controlled trial examining the effectiveness of a Postnatal Psychoeducational Programme (PPP) on maternal outcomes including self-efficacy in newborn care, social support and post- natal depression. The purposive sampling was used to select primiparas who	Findings Comprehensive educational booklet. Women found information provision in the form of a booklet easy to understand, with a simple, colourful pictorial layout that explained information in point form. Women valued the content page, reading list and important contacts in case of an emergency. Women also liked the size of the booklet as it was easy to handle even when breastfeeding. Future directions: Women	Comments (assessed using the CASP checklist for qualitative studies): Aims and qualitative methodology: Aim of the study was clearly reported. Research design was appropriate for answering the research question. Research design: The authors do not justify the methods used Recruitment strategy: Sample
To explore the perceptions of primiparas on the contents, delivery and personal impact of postnatal psychoeducation programme Country/ies where the study	Attendance to antenatal class: Yes n=4 (22.2%), No n=14 (77.8%). Type of birth: Caesarean section n=10 (55.6%), Vaginal birth n=8 (44.4%)	were able to read and speak English with different maternal self-efficacy scores at six weeks postpartum from the intervention group (n 1/4 61) Data collection	were happy to receive information though home visit followed by telephone calls and supported with an educational booklet. When reflecting on the number of visits / phone calls women generally wanted more than the programme	selection was clearly reported <b>Data collection:</b> There is a clear description of how interviews were conducted. Saturation of data was reached and discussed.
was carried out Singapore Study dates Not reported	Inclusion criteria Not reported for this study. To be included in the primary RCT women were: (1) primiparas; (2) 21 years old or above; and (3) able to read	Face-to-face semi-structured interviews at 6 to 9 weeks post- partum in the mothers home. Interviewers were audio recorded.	offered. Web-based learning was also suggested to be added. More information in the educational booklet. Some	Relationship between researcher and participants: The authors do discuss the potential influences of the interviewers.
Source of funding	and speak English Exclusion criteria	Data analysis Data saturation was achieved at the 15th participant. Three additional interviews were	women felt there should be more information in the educational booklet. Suggestions on information to	<b>Ethical issues:</b> Approval for the study was obtained from the hospital's Institutional Review

Study Details	Participants	Methods	Findings	Comments
Funded by the Sigma Theta Tau International Upsilon Chapter Singapore in 2012.	Not reported for this study. Participants were excluded from the primary RCT if they 1) have a history of psychiatric disease(s) before and during pregnancy as identified by medical records; (2) have a complicated assisted birth such as vacuum or forceps with fourth-degree tear; (3) have delivered a newborn with apparent congenital anomalies or delivered a stillborn; (4) have delivered a newborn who cannot be discharged home with the mother; and/or (5) are not able to stay in Singapore in the first 6 weeks postpartum after being discharged from the hospital	conducted and no additional information yielded. Thematic analysis was used to analyse the data. Transcribed data were reviewed and coded independently by the first and last authors to ensure rigour. The related words, sentences or paragraphs representing an idea were identified and coded into a category for the analysis of emerging sub-themes. After independent coding, the authors compared the sub- themes, looked for commonalities and differences, and identified the themes. Challenges in the postnatal period - negative emotions, difficulties in breastfeeding, lack of knowledge in newborn care, support issues, differences on confinement practices Benefits of participating in PPP - Enhanced knowledge on newborn care, self-care and breastfeeding, enhanced confidence level, improved help seeking behaviour, enhanced emotional well-being Strengths of PPP - convenient and helpful, established trusting relationship with the	be added varied from general feedback on updates of information to adding specific topics such as gastric issues with the infant including frequent regurgitation and practical tips on putting the infant to sleep. Web-based learning: Women thought web-based learning would aid this programme. Women wanted an online chat, forum or a Facebook page created so they could pose their queries at any time of the day. Women thought web- based learning would be effective and would provide longer-term support system: Convenient and helpful. Women found the programme convenient and valued the assistance was provided to them. Women appreciated not needing to leave their homes.	<ul> <li>Board prior to implementation of the study.</li> <li>Data analysis: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were not discussed by the authors.</li> <li>Findings: In relation to the credibility of the findings authors held constant meetings to discuss consensus and accuracy of interpretations of the data. The authors do not discuss the transferability of the findings provided some discussion of the findings.</li> <li>Value of research: They do discuss the implications of their findings for policy and practice</li> </ul>

Study Details	Participants	Methods	Findings	Comments
		midwife, comprehensive educational booklet, cost saving, fair and no discrimination service Future directions - PPP as route in care, more home-visits, more phone follow-ups, more information in educational booklet, web-based learning. Field notes were used to ensure the transferability and audio-recording was used to further enhance the dependability of the data.		and identify areas where future research is needed. Overall methodological concerns: Minor
Full citation Sundstrom, B., Mothers "Google It Up:" Extending Communication Channel Behaviour in Diffusion of Innovations Theory, Health communication, 31, 91-101, 2016 Ref Id 824035 Study type Qualitative Aim of the study Understand women's perceptions and use of new	Sample size N=44 Characteristics Not reported Inclusion criteria All English-speaking biological mothers who experienced a live birth at hospital during the study enrolment period were eligible for inclusion. Exclusion criteria Not reported	Setting A specialty hospital for women and newborns where more than 73% of all births in the state take place. Sample selection Not reported Data collection In-depth semi-structured interviews either at hospital or over the telephone. Interviews and memos were typed or transcribed. Of the 44 in-depth interviews, 27 were held at the hospital and 17 were held over	Findings reported in the study Resisting mass media: Whilst the media for example TV or magazines are an easy way to disseminate information to a large proportion of women, women find it hard to trust the media, it can raise unnecessary fears and there is typically too much information already out there. Whilst adverts may increase awareness surrounding causal links to a child's illness and medication taken during pregnancy, those who needed to take such	<ul> <li>Limitations <ul> <li>(assessed using the CASP</li> <li>checklist for qualitative</li> <li>studies):</li> </ul> </li> <li>Aims and qualitative <ul> <li>methodology: Aim of the study</li> <li>was clearly reported. Research</li> <li>design was appropriate for</li> <li>answering the research</li> <li>question.</li> </ul> </li> <li>Research design: The authors <ul> <li>justify the methods used.</li> </ul> </li> <li>Recruitment strategy: Sample selection was not clearly <ul> <li>reported.</li> </ul></li></ul>

Study Details	Participants	Methods	Findings	Comments
media, mass media, and interpersonal communication channels in relation to their highest priority health issue. Country/ies where the study was carried out US Study dates Not reported Source of funding The Brown University Healthy Communities Initiative provided financial support for the project		the telephone. Interviews averaged 1 hour in length. <b>Data analysis</b> The grounded theory approach and diffusion of innovations theory. HyperRESEARCH 3.5.2 qualitative analysis software was used to analyse data. A constant-comparative method was conducted throughout data collection to analyse transcripts. Line-by-line coding was completed by comparing each interview against the next for similarities and differences. This process of coding relies on deriving and developing concepts from data.	primary form of communication. This was because they felt it offered increased flexibility, easy to access and easy to save for future reference. Women also suggested that they would be more likely to forward a text message to family or friends.	Data collection: There is some description of how interviews were conducted. Saturation of data discussed. Relationship between researcher and participants: The authors do not discuss the potential influences of the interviewers. Ethical issues: Approval for the study was obtained from the appropriate Institutional Review Board prior to implementation of the study. Data analysis: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The analytical process was described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were not discussed by the authors.

Study Details	Participants	Methods	Findings	Comments
				<ul> <li>Findings: In relation to the credibility of the findings, no second checking was reported. The authors do not discuss the transferability of the findings to other populations. The authors provided some discussion of the findings.</li> <li>Value of research: They do discuss the implications of their findings for policy and practice and identify areas where future research is needed.</li> <li>Overall methodological concerns: Moderate</li> </ul>
Full citation Weckesser A. Farmer N. Dam R. Wilson A. Morton V.H. Morris R.K. Women's perspectives on caesarean section recovery, infection and the PREPS trial: A qualitative pilot study, BMC Pregnancy and Childbirth, 19, 2019 Ref Id 1164411	Sample size N=21 Characteristics Age (mean, SD, range): 34.4 (26 to 45) Marital status: n=15 married, n=5 with partner, n=1 no response Ethnicity: n=16 White British, n=1 British Asian, n=2 Mixed Race British, n=1 White	Setting Maternity hospital in the West Midlands Sample selection A research midwife recruited women from the postnatal wards and through social media adverts. Purposive sampling was used to recruit women with characteristics and experiences relevant to the research study.	Findings reported in the study Infection: information provision and needs Women were unable to recall being given information about caesarean section recovery and infection prevention. Particularly if this was given shortly after the operation. Women who had an elective caesarean recalled being given paperwork with the risks of the caesarean, but not information	Limitations (assessed using the CASP checklist for qualitative studies): Aims and qualitative methodology: Aim of the study was clearly reported. Research design was appropriate for answering the research question.

Study Details	Participants	Methods	Findings	Comments
Study DetailsStudy type QualitativeAim of the study To assess women's own priorities and information needs in relation to caesarean section recovery and infection preventionCountry/ies where the study was carried outUKStudy dates September to October 2017Source of funding Funded by the National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme (Grant Reference Number PB-PG-1215-20013).	ParticipantsAmerican, n=1 African, n=1 AsianEmployed: n=11 full-time, n=8 part-time, n=2 unemployedNo. of children (mean, range): 1.9 (1-4)First caesarean section: n=12 yes, n=9 no Type of caesarean: n=12 elective, n=9 emergency Infection after last caesarean: n=4 yes, n=17 noInclusion criteria None reportedKexclusion criteria None reported	Methods Data collection Six telephone interviews and two focus group discussions with women who had had a caesarean section within the last 6 months. Guides for interviews were informed by a literature review of qualitative studies on women's experiences of caesarean section recovery and reviewed by the PREPS trial management group. Interviews/discussions were audio recorded and transcribed verbatim. Interviews lasted 20-30 minutes and focus group discussions lasted approximately one hour. The PREPS trial (Vaginal Preparation at caesarean section to Reduce Endometritis and Prevent Sepsis – a feasibility study of chlorhexidine) is a feasibility study investigating whether cleansing the vagina immediately before caesarean section, with the antiseptic solution Chlorhexidine, will	Findings regarding caesarean recovery and infection prevention. Other women did recall beginning given information about caesarean recovery advice and wound care. Women felt they were not given adequate information about caesarean section recovery and infection prevention, particularly in comparison to other surgeries. Women felt that information given post surgery was difficult to recall, and therefore wanted information in a pamphlet. However, other women felt that too much information was given through paperwork and it might get lost. One woman felt that antenatal classes focus on natural births and do not provide enough information above caesarean delivery and recovery.	CommentsResearch design: The authors do not justify the methods usedRecruitment strategy: Sample selection was clearly reportedData collection: There is a clear description of how interviews were conducted. Saturation of data was achieved.Relationship between researcher and participants: The authors do not discuss the potential influences of the interviewers.Ethical issues: Approval for the study was obtained from the London City & East Research Ethics Committee and the Birmingham Women's Hospital prior to implementation of the study.Data analysis: Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were

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Study Details	Participants	Methods	Findings	Comments
		sepsis. Women recruited to this study were not participants from the PREPS study. Data analysis Thematic analysis was carried out by the research team. Data was independent read by two researchers, who identified emergent themes and created initial codes. Codes were brought together to create a coding framework using NVIVO 11. Data saturation was achieved.		described and the use of predefined methods from the literature was mentioned. It is clear how categories were identified. Contradictory data were not discussed by the authors. Findings: In relation to the credibility of the findings, transcripts, coding results and discussions were held between the researchers. The authors do not discuss the transferability of the findings to other populations. The authors provided some discussion of the findings. Value of research: They do not discuss the implications of their findings for policy and practice but do identify areas where future research is needed. Overall methodological concerns: Moderate
Full citation Weston, Claire, Anderson, John L., Internet use in pregnancy,	Sample size N= 6 postnatal women. Study also included N=13 midwives and N=7 antenatal	Setting Conquest Hospital, Hastings. Sample selection	Findings reported in the study Preferring midwifery advice: Women held midwives in high	Limitations (assessed using the CASP checklist for qualitative studies):

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Study Details	Participants	Methods	Findings	Comments
British Journal of Midwifery, 22, 488-493, 2014 Ref Id 823472 Study type Qualitative Aim of the study To explore the experiences of midwives, antenatal and postnatal women to try to discover their perceptions of the value of internet use in pregnancy Country/ies where the study was carried out England, UK Study dates 2012 to 2013. Dates inferred from sampling methods. Source of funding Authors conflicts of interest and funding not reported	<ul> <li>women - their data has not been extracted as not relevant to research question.</li> <li>Characteristics <ul> <li>Not reported</li> </ul> </li> <li>Inclusion criteria</li> <li>Not reported</li> </ul> <li>Exclusion criteria <ul> <li>Not reported</li> </ul> </li>	Primiparous women with babies born on 1 November 2012 were invited to take part in the study. Primigravid women with an expected date of birth of 1 May 2013 were invited to take part in the study. Enrolment was continued for both groups on consecutive days until the required number of participants (6 to 10 per group) were recruited. <b>Data collection</b> There were three focus groups—one for midwives, one for antenatal women and one for postnatal women. Followed by one-to-one interviews with people uninvolved in the focus groups—three midwives (one hospital midwife and two community midwives), two antenatal women. Interviews were partly structured. Focus groups were conducted at a NHS maternity department. One-to-one interviews took place in the local maternity department and two of the postnatal	regard and preferred midwifery advice to internet information. Women would use the internet for minor queries and product advice but would seek their midwife's advice for more serious problems. Popular websites: The NHS website was used with confidence by all the participants.	Aims and qualitative methodology: Aim of the study was clearly reported. Research design was appropriate for answering the research question. Research design: The authors do not justify the methods used Recruitment strategy: Sample selection was clearly reported Data collection: There is a clear description of how interviews were conducted. Saturation of data was not discussed. Relationship between researcher and participants: The authors do not discuss the potential influences of the interviewers. Ethical issues: Approval for the study was obtained from the BSMS Division of Medical Education Dissertation Panel, the Research and Development Department in the local NHS Trust and the National

Study Details	Participants	Methods	Findings	Comments
		women were interviewed in their homes.		Research Ethics Service prior to implementation of the study.
		Data analysis Not reported		<b>Data analysis:</b> Results were presented clearly with the generous use of quotes where appropriate (quotes and the researchers' own input were clearly distinguished). The analytical process was not described and the use of predefined methods from the literature was not mentioned. It is unclear how categories were identified. Contradictory data were not discussed by the authors.
				<b>Findings:</b> In relation to the credibility of the findings no mentions of a second research checking the findings was reported. The authors do not discuss the transferability of the findings to other populations. The authors provided some discussion of the findings.
				Value of research: They do discuss the implications of their findings for policy and practice but do identify areas where future research is needed.

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Study Details	Participants	Methods	Findings	Comments
				Overall methodological
				concerns: Moderate

CASP: critical appraisal skills programme; N: number of participants in study; NCT: National Childbirth Trust; PPP: Postnatal Psychoeducational Programme; RCT: randomised controlled trial; SD: Standard deviation; WIC: Women Infants and Children

# Appendix E – Forest plots

# Forest plots for review question: When and how should information be given to mothers and their partners about postnatal health of the mother?

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

# Appendix F – GRADE-CERQual tables

GRADE-CERQual tables for review question: When and how should information be given to mothers and their partners about postnatal health of the mother?

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
Sub-theme 1.1. Whe	n pregnant		
<ul><li>5 studies</li><li>Olander 2012,</li></ul>	Women and partners preferred receiving information whilst the woman was pregnant and had more time to participate in courses, read and digest the information and	Methodological limitations: moderate concerns (5 studies with a moderate rating based on CASP qualitative checklist)	Low
To explore what ty of healthy eating services and suppo prenatal and postr	the case of health information that required behaviour changes such as healthy eating, women felt that making there changes whilst program would increase the	Relevance: moderate concerns (5 studies used convenience sampling and some reported limited demographic data, therefore unlikely to all be generalisable to the whole UK population)	
<ul> <li>Persson 2011, To report factors which influence</li> </ul>	'I think maybe if you'd started well from the beginning then you probably would have carried on, because you'd	Coherence: minor concerns (the data contradicts other findings from the review ; no ambiguous data)	
<ul> <li>mothers' sense of security during the first postnatal wee</li> <li>Shorey 2018, To explore the view of parents of newborns with reg to the content and delivery of a mobil health (mHealth) a based postnatal educational progra</li> </ul>	<ul> <li>k. 'Once when the baby comes, then you areengaged in being with the baby, doing things, you are sleepless alsoWhen you are pregnant, you have more time, so you can go through the educational videos or seek expert advice.' (Shorey 2019, p7)</li> <li>e</li> <li>pp-</li> </ul>	Adequacy: minor concerns (5 studies offering moderately rich data, 2 studies were about a health app that provided information on both the mother and babies health. Data reported typically seemed more relevant to information about the baby than the mother's health)	

Table 5:	Clinical evidence profile for theme 1: preferences about timing of specific information provision
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		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
Weckesser 2019, To understand women's own priorities and information needs in relation to caesarean section recovery and infection prevention Shorey 2019, To examine the experiences and perceptions of participants who participated in a supportive education parenting program intervention study			
Sub-theme 1.2. After birt	h		
1 study ● Persson 2011,	Women wished to have a postpartum talk with the delivery midwife enabling them to ask questions and get	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist)	Low
To report factors which influence mothers' sense of	help as necessary. 'I would appreciate if it was part of the routine to have a little talk after the birthit doesn't need to be a long talk	Relevance: minor concerns (1 study with some demographic data, likely to be somewhat generalisable to the whole UK population)	
security during the first postnatal week.	or so just as long as you get to meet the midwife who was there.' (Persson 2011, p111)	Coherence: no concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study offering examples of how to increase the sense of security in women, of which postpartum talks were deemed helpful)	

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
1 study • Weckesser 2019, To understand	Veckesser 2019, o understand vomen's own riorities and elation to caesareanto them about wound care and infection prevention if given shortly after the surgery. From this we can infer that providing information soon after surgery would not be 	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist) Relevance: minor concerns (1 study likely to be generalisable to	Low
women's own priorities and information needs in		the whole UK population) Coherence: no concerns (no data that contradict the review finding; no ambiguous data)	
relation to caesarean No supporting quote provided for this theme. section recovery and infection prevention	Adequacy: moderate concerns (1 study specifically looking at women's recall of information given about caesarean section recovery, wound care and infection prevention)		
Sub-theme 1.4. Before dis	charge whilst in hospital		
2 studies • Persson 2011	There are mixed views about whether information shouldN11be given before discharge from hospital. One studyaactorsreported that women wished to receive preventiveRenceinformation before discharge from the hospital includingdense ofhints and advice about problems and situations that arep	Methodological limitations: moderate concerns (2 studies with a moderate rating based on CASP qualitative checklist)	Very low
To report factors which influence mothers' sense of		Relevance: minor concerns (2 studies with some demographic data, likely to be somewhat generalisable to the whole UK population)	
security during the first postnatal week.	worried about what they now saw as 'very small	Coherence: moderate concerns (data was contradictory but not ambiguous)	
<ul> <li>Henshaw 2018, To explore common challenges along with support and education needs experienced during the first 6</li> </ul>	fluenceinformation before discharge from the hospital including hints and advice about problems and situations that are common during the first days after discharge. Women had worried about what they now saw as 'very small problems', which could have been avoided if they had known that the 'small problem' was not unusual. Whilst one study reported how women found it hard to recall information that was given to them in hospital, suggesting this is not the best time to provide information.	Adequacy: moderate concerns (1 study offering examples of how to increase the sense of security in women, of which being prepared for the time after birth was covered, 1 study discussing the recall of information and support needed in the first 6 weeks postpartum)	
weeks postpartum	'You bleed and your breasts are tense and leaking and, yeah, it would have been good, yeah, how things are when you get home, this can happen and then you have to do that.' (Persson 2011, p111)		

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		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
	However, women found it hard to recall information that was given to them in the hospital, suggesting this was not the best time to provide information. <i>'It was amazing how much I was given in the hospital and</i> <i>told in the hospital that I couldn't tell you about now.'</i> (Henshaw 2018, p1673)		
Sub-theme 1.5. At dischar	ge		
1 study • Haith-Cooper 2018, To	The evidence indicated that the point of discharge was not the best time to provide information. During the discharge	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist)	Low
• Haith-Cooper 2018, To explore the perceptions of women and senior student	process women felt they were being given a lot of verbal information that was difficult to retain whilst also feeling rushed by the midwife to leave. This resulted in women	the whole UK population, but very limited information on the setting of the study) Coherence: minor concerns (data offered differing opinions with no clear conclusion)	
midwives related to the postnatal hospital discharge process and	feeling they were not receiving all the information they should. In addition, some women were themselves in a rush to get out of the hospital and consequently were not		
maternal sepsis prevention advice.	<ul> <li>making full use of the information available to them.</li> <li>'But it means it's all a rush and you think, "what if they missed something?' (Haith-Cooper 2018, p250)</li> <li>'I was rushing it because I just wanted to go [I answered] "Yes" to every question, "okay, brilliant, yeah, go, go, go," but I don't think the person doing it was rushing at all, so that was good.' (Haith-Cooper 2018, p 250)</li> <li>Women also felt there was a lot of verbal information being given to them at this point, and were unable to recall specific details – in the context of this study – relating to infection and sepsis prevention</li> </ul>	Adequacy: moderate concerns (1 study specifically looking at women's knowledge of sepsis)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

#### Table 6: Clinical evidence profile for theme 2: level

of detail			
		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
Sub-theme 2.1. Too much	or too little information		
<ul> <li>3 studies</li> <li>Haith-Cooper 2018, To explore the perceptions of women and senior student midwives related to the postnatal hospital discharge process and maternal sepsis prevention advice.</li> <li>Weckesser 2019, To understand women's own priorities and information needs in relation to caesarean section recovery and infection prevention</li> <li>Henshaw 2018, To explore common challenges along with support and education needs experienced during the first 6 weeks postpartum</li> </ul>	There are mixed views about the ideal amount of information that should be shared in the postnatal period. One study reported how women felt there was too much verbal information given at discharge for them to be able to recall specific details. Some women also felt they were given too many leaflets that went unread. On the other hand 2 studies reported how women did not feel like they were given enough information, particularly regarding caesarean section aftercare and postpartum depression. 'So many leaflets and so many advice and information but I don't remember exactly about this.' (Haith-Cooper 2018, p251) 'My mum had a hysterectomy and the level of information she got for a fairly similar surgery was mountains and mountains. And we just like, don't have anything' (Weckesser 2019, p6) 'I wish that I had been a little more educated on how I could have dealt with it, but I didn't know. I was just a mess. So, I wish that there would have been more information forced on me about it than just a pamphlet.' (Henshaw 2018, p1673)	Methodological limitations: moderate concerns (3 studies with a moderate rating based on CASP qualitative checklist) Relevance: minor concerns (3 studies likely to be generalisable to the whole UK population, but one had very limited information on the setting of the study) Coherence: moderate concerns (data contradicts other findings of this review; no data was ambiguous) Adequacy: moderate concerns (1 study specifically looking at women's knowledge of sepsis, 1 study specifically looking at women's recall of information given about caesarean section recovery, wound care and infection prevention and 1 study discussing the recall of information and support needed in the first 6 weeks postpartum)	Low

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

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#### Table 7: Clinical evidence profile for theme 3:

receiving information privately or as a group

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
Sub-theme 3.1. Group ses	sions		
<ul> <li>1 study</li> <li>Olander 2012, To explore what type of healthy eating services and support prenatal and postnatal</li> </ul>	Women receiving information on behaviour change (healthy eating) would prefer this to be in a group session	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist)	
	however, it was acknowledged that group sessions might not work for everyone and a choice should be offered. 'I think group-based is quite good.' (Olander 2012, p240)	Relevance: serious concerns (1 study that did not report any demographic data or inclusion/exclusion criteria, and all women were recruited from a deprived area, unlikely to be generalisable to the whole UK population)	
women want		Coherence: moderate concerns (data offered different options and not one clear decisive option)	
		Adequacy: moderate concerns (1 study offered data relating to how women wished to receive one particular form of health information, potential concerns around the generalisable to other aspects of health promotion)	
Sub-theme 3.2. With their	r partner		
<ol> <li>study</li> <li>Persson 2011, To report factors which influence mothers' sense of security during the first postnatal week.</li> </ol>	Women wished for their partner to be involved, acknowledged and included in discussions. Women found that their partners were often dismissed by healthcare professionals.	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist)	Low
	'It was probably good for my partner that he was allowed to be there too, that he could listen and prepare himselfI think the father can easily become a background figure otherwise, if they don't know at all what is to come.'	Relevance: minor concerns (1 study with some demographic data, likely to be somewhat generalisable to the whole UK population)	
	(Persson 2011, p111) 'Somehow, he wasn't part of it when he just sat there. It was like that the whole time.' (Persson 2011, p110)	Coherence: no concerns (no data that contradict the review finding; no ambiguous data)	

#### Provision of information about the postnatal health of women

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
		Adequacy: moderate concerns (1 study offering examples of how to increase the sense of security in women by having their partners involved, potentially not generalisable to all types of information provisions)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

	Description of review finding	CERQual Quality Assessment	
Study information		Assessment of CERQual components	Overall confidence (quality)
Sub-theme 4.1.Text mess	ages		
2 studies • Brown 2014,	2014,Women viewed texting as a flexible, accessible and familiar method of communication. Information given via text message is easily stored, can be forwarded on to friends and family and can be referred to at a later date.ing a health <i>It's my source of communication (texting), I don't read</i> handouts or pamphlets.' (Brown 2014, p361)ention via text <i>You don't have to read it. You can delete it. You can</i>	Methodological limitations: serious concerns (2 studies with low ratings based on CASP qualitative checklist)	Very low
To examine use of technology for delivering a health promotion		Relevance: moderate concerns (2 studies both used convenience sampling and both reported limited demographic data, therefore unlikely to be generalisable to the whole UK population)	
intervention via text blasts in single, low-		Coherence: no concerns (no data that contradict the review finding; no ambiguous data)	
income, adolescent, minority mothers and to describe their perceptions and experiences with the intervention.	forward it. If it had vital information, I would forward it to my sisters. I would forward texts to my sisters, or my friends. We could start a texting chain message. It feels good sending it on, sharing important information.' (Sundstrom 2016, p96)	Adequacy: serious concerns (2 studies offered weak data, one study addressed a text message health intervention therefore their outcome of interest within the paper focused on how women felt about receiving text message information as opposed to what would be their preferred method of information dissemination)	
<ul> <li>Sundstrom 2016, Understanding women's feelings</li> </ul>			

#### Table 8: Clinical evidence profile for theme 4: format of the information provided

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence (quality)
towards media for health issues			
Sub-theme 4.2. Practical s	sessions		
<ul> <li>1 study</li> <li>Olander 2012, To explore what type of healthy eating</li> </ul>	Information about healthy eating should be delivered as practical sessions where women could be shown how to alter their diet and cook healthy meals. Practical sessions would be preferable to leaflets describing how to cook	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist)	Very low
services and support prenatal and postnatal women want	healthy meals. It was acknowledged that these types of sessions would need to be well advertised and possibly midwives or government websites could market these. All quotes	Relevance: serious concerns (1 study that did not report any demographic data or inclusion/exclusion criteria, and all women were recruited from a deprived area, unlikely to be generalisable to the whole UK population)	
	were from prenatal women. 'I think practical makes more sense, if you're given a leaflet you just go and pile up leaflets in a big box.' (Olander 2012, p240)	w to moderate rating based on CASP qualitative checklist) sions ok Relevance: serious concerns (1 study that did not report any demographic data or inclusion/exclusion criteria, and all women were recruited from a deprived area, unlikely to be generalisable to the whole UK population) Coherence: no concerns (no data that contradict the review	
Sub-theme 4.3. Hand boo	k		
<ul> <li>1 study</li> <li>Shorey 2015, To explore the perceptions of primiparas on the</li> </ul>	Women reported mixed views about receiving information in a booklet. Women who received a booklet in addition to a psychoeducation programme said it was easy to understand with a good structure, simple layout and pictures and it helpfully had a	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist)	Very low

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence (quality)
personal impact of postnatal psychoeducation programme	contents page, important contact details, and was a good size. However, the booklet did not contain all the information women wanted. 'The book has everythingthe information about taking	Relevance: moderate concerns (1 study that included women from a range of education backgrounds, employment and ethnicities – although none Caucasian; unlikely to be generalisable to the whole UK population)	
	care of the babyeven about giving milk, breastfeeding, why the babies cry, what we should do. We can just read it as a storybook to have more knowledge about the baby and self. Any doubt, we could take out the book anytimeif I really need the answer to the question the book answers everything.' (Shorey 2015, p160)	Coherence: moderate concerns (within the study, reflections on the booklet were contradictory, on balance the booklet was helpful but could be better) Adequacy: moderate concerns (1 study offering data on how their specific booklet was received, unlikely to be generalisable to the overall question on how women wish to receive information)	
	'Can we add some information for mummies about how to appraise the sleep changes and how can we get baby fall into sleep very quickly and also the contents of the booklet should have practical tips on sleeping behaviours or put the baby to sleep.' (Shorey 2015, p161)		
Sub-theme 4.4. Mixture			
1 study • Shorey 2015,	<b>Mixture</b> Women were happy to receive information though	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist)	Very low
To explore the perceptions of primiparas on the contents, delivery and personal impact of postnatal psychoeducation	home visits followed by telephone calls and supported with an educational booklet as part of the psychoeducation programme. When reflecting on the number of visits or phone calls women generally wanted	Relevance: moderate concerns (1 study that included women from a range of education backgrounds, employment and ethnicities – although none Caucasian, therefore unlikely to be generalisable to the whole UK population)	
	more than the programme offered. Web-based learning was also suggested to be added. <i>No quotes from postnatal women provided by the</i>		
programme	authors (some from antenatal women)	Adequacy: moderate concerns (1 study offering data on how their specific information providing programme was received,	

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence (quality)
		unlikely to be generalisable to the overall question on how women wish to receive information)	
Sub-theme 4.5. Verbally			
<ul> <li>1 study</li> <li>Haith-Cooper 2018, To explore the perceptions of women and senior student midwives related to the postnatal hospital discharge process and maternal sepsis prevention advice.</li> </ul>	Women felt there was too much information given to them verbally, particularly at discharge. Women were unable to recall specific details. <i>No supporting quotes provided for this theme.</i>	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist)	Low
		Relevance: minor concerns (1 study likely to be generalisable to the whole UK population, but very limited information on the setting of the study)	
		Coherence: no concerns (no data that contradict the review finding; no ambiguous data)	
		Adequacy: moderate concerns (1 study specifically looking at women's knowledge of sepsis)	
Sub-theme 4.6. Leaflets			
<ul> <li>3 studies</li> <li>Haith-Cooper 2018, To explore the perceptions of women and senior student midwives related to the postnatal hospital discharge process and maternal sepsis prevention advice.</li> <li>Weckesser 2019, To understand women's own priorities and information needs in</li> </ul>	Women felt they were given too many leaflets to read. Women also reported that the leaflets did not provide enough information. On the other-hand some women favoured leaflets because they could be taken home and referred to at a later time. 'So many leaflets and so many advice and information but I don't remember exactly about this.' (Haith-Cooper 2018, p251) 'I wish that I had been a little more educated on how I could have dealt with it, but I didn't know. I was just a mess. So, I wish that there would have been more information forced on me about it than just a pamphlet.' (Henshaw 2018, p1673)	Methodological limitations: moderate concerns (3 studies with a moderate rating based on CASP qualitative checklist)	Low
		Relevance: minor concerns (3 studies likely to be generalisable to the whole UK population as 2 were set in the UK and one from the US purposively recruited a wide diversity of participants)	
		Coherence: minor concerns (contradictory data identified by not ambiguous)	
		Adequacy: moderate concerns (3 studies specifically looking/discussing individual elements of women's postnatal health, one on sepsis, one on caesarean section wound care and one on postnatal depression)	

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence (quality)
relation to caesarean section recovery and infection prevention			
<ul> <li>Henshaw 2018, To explore common challenges along with support and education needs experienced during the first 6 weeks postpartum</li> </ul>			
Sub-theme 4.7 Phone App			
2 studies • Shorey 2018	P Women reported mixed experiences with phone apps. Some women and partners found using the app a good resource for information, with user-friendly features and easy to find, tailored information. It was valuable that midwives could be contacted through the app and that different learning styles were catered for with	Methodological limitations: moderate concerns (2 studies with a moderate rating based on CASP qualitative checklist)	Very low
To explore the views of parents of newborns with regard		Relevance: moderate concerns (2 studies that included participants from a range of ethnicities, unlikely to be generalisable to the whole UK population).	
to the content and delivery of a mobile health (mHealth) app–	information being provided in pdfs, audio and videos. However, there were some technical issues with the	Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data).	
<ul> <li>based postnatal educational program</li> <li>Shorey 2019, To examine the experiences and perceptions of participants who participated in a supportive education parenting program intervention study</li> </ul>	information being provided in pdfs, audio and videos.	Adequacy: moderate concerns (2 studies were on a health app that provided information on both the mother and babies health. Data reported typically seemed more relevant to information about the baby than the mother's health).	

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence (quality)
Sub-theme 4.8. Web-base	d		
3 studies • Shorey 2015,	Women were interested in web-based learning as it would offer a longer-term support system. The	Methodological limitations: moderate concerns (3 studies with a moderate to low rating based on CASP qualitative checklist).	Very low
To explore the perceptions of primiparas on the contents, delivery and	information would need to be provided by a reputable organisation, for example the NHS. Online chat or forums were desirable, where women could post their queries at any time of the day. <i>'Having a forum for the moms would be good as they can</i> <i>pose their questions anytime. Especially, some questions</i>	Relevance: serious concerns (1 study did not include any Caucasian women and 2 studies did not report participant characteristics, therefore unclear how generalisable these findings will be to the whole UK population).	
postnatalpose their questions anytime. Especially, some questionspsychoeducationmay be very common as one mom has already asked andprogrammemidwife had already answered and you are posing the	Coherence: no or very minor concerns (no data that contradict the review finding; no ambiguous data).		
<ul> <li>Sundstrom 2016, Understanding women's feelings towards media for health issues</li> <li>Weston 2014, To explore the experiences of midwives, antenatal and postnatal women to try to discover their</li> </ul>	same question then rather than midwife repeating you can actually find the answerthat could be very good and practical way.' (Shorey 2015, p160) 'In terms of women's health, the best thing would be a forum —where you can select what you want to see, exactly what information you want and need.' (Sundstrom 2016, p97) 'It's the NHS. You can look up things likeC sectionsyou know it's gonna be right and it's all been researched and it's accurate.' (Weston 2014, p492)	Adequacy: moderate concerns (1 study offering data on how their specific information providing programme was received, unlikely to be generalisable to the overall question on how women wish to receive information the other 2 studies looked at how media/internet was used by women, therefore again specific to their studies – limited generalisability to the review question).	
perceptions of the value of internet use in pregnancy Sub-theme 4.9. Through n	aadia		

#### Provision of information about the postnatal health of women

		CERQual Quality Assessment		
Study information	Description of review finding	Assessment of CERQual components	Overall confidence (quality)	
<ul> <li>1 study</li> <li>Sundstrom 2016, Understanding women's feelings towards media for health issues</li> </ul>	<ul> <li>Whilst TV and magazines are an easy way to disseminate information to a large proportion of women, women find it hard to trust the media, it can raise unnecessary fears and there is typically too much information already out there. Whilst adverts may increase awareness about causal links to a child's illness and medication taken during pregnancy, those depending on such medications find them too upsetting to watch.</li> <li>'They cover breastfeeding and how to make them sleep. There's so much stuff they cover, I can't even remember. I read so much about it. The strollers to use, the safety products, what not to do, what to do.' (Sundstrom 2016,</li> </ul>	Methodological limitations: serious concerns (1 study with a low rating based on CASP qualitative checklist) Relevance: serious concerns (1 study that did not report any demographic data or inclusion/exclusion criteria, and women were recruited from a deprived area, unlikely to be generalisable to the whole UK population)	Very low	
	p94) 'During my first pregnancy, I would sit and watch a lot of TV, especially pregnancy stories. You see a lot of complications through the television. It made me very frightened. I think you need to be careful what you watch, so you don't think that what you see is what is going to happen to you. I try not to watch too much TV,	Coherence: serious concerns (contradictory data)		
	<ul> <li>especially reality shows, like A Baby Story or I Didn't Know I Was Pregnant. Even though it is about women and what they go through, their labour and delivery, it gives fear to you, and of course you don't want that.' (Sundstrom 2016, p95)</li> <li>'I hate those commercials putting bad information in people's heads. They don't make me nervous, they just put bad information out there I knew what the risks were so they didn't make me nervous, they just made me mad.' (Sundstrom 2016, p95)</li> </ul>	Adequacy: moderate concerns (1 study offering examples of how women feel about a particular form of information provision as opposed to how they wish to receive information – limited generalisability to the review question.)		

Subgroup – younger women (19 years or younger)

#### Provision of information about the postnatal health of women

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence (quality)
1 study • Brown 2014,	familiar method of communication. Information given via text message is easily stored, can be forwarded on to friends/family and can be referred to at a later date. <i>'It's my source of communication (texting), I don't read</i> <i>handouts or pamphlets.'</i> (Brown 2014, p361) vention via text s in single, low-	Methodological limitations: serious concerns (1 study with low ratings based on CASP qualitative checklist)	Very low
To examine use of technology for delivering a health promotion		Relevance: moderate concerns (1 study that used convenience sampling and reported limited demographic data, therefore unlikely to be generalisable to the whole UK population)	
intervention via text blasts in single, low-		Coherence: no concerns (no data that contradict the review finding; no ambiguous data)	
income, adolescent, minority mothers and to describe their perceptions and experiences with the intervention.		Adequacy: serious concerns (1 study offered weak data, the study addressed a text message health intervention therefore their outcome of interest within the paper focused on how women felt about receiving text message information as opposed to what would be their preferred method of information dissemination)	

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### Table 9: Clinical evidence profile for theme 5: consistency of information

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
Sub-theme 5.1. Being give	en consistent advice		
2 studies • Persson 2011,	Women wished to receive consistent advice from all healthcare professionals. Women experienced inconsistent and conflicting advice generally, and	Methodological limitations: moderate concerns (2 studies with a moderate rating based on CASP qualitative checklist)	Low
To report factors which influence mothers' sense of security during the first postnatal week.	inconsistent and conflicting advice generally, and especially in hospital. Inconsistency in advice left women feeling staff were not well-informed and that they would benefit from an update of their knowledge.	Relevance: minor concerns (1 study with some demographic data, likely to be somewhat generalisable to the whole UK population, 1 study likely to be generalisable to the whole UK population, but very limited information on the setting of the study)	

#### Provision of information about the postnatal health of women

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
<ul> <li>Haith-Cooper 2018, To explore the</li> </ul>	'You get different advice from different people about the same thing, that's troublesome and difficult to sort out,	Coherence: no concerns (no data that contradict the review finding; no ambiguous data)	
perceptions of women and senior student midwives related to the postnatal hospital discharge process and maternal sepsis prevention advice.	and be on top of ityou try to listen to everyone, it was mostly breastfeeding that it was about, but it was really everything.' (Persson 2011, p110)	Adequacy: moderate concerns (1 study offering examples of how to increase the sense of security in women by being given relevant information, 1 study specifically looking at women's knowledge of sepsis)	

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### Table 10: Clinical evidence profile for theme 6: who should deliver the information

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
Sub-theme 6.1. Women w	ith direct experience		
2 studies • Olander 2012,	Women felt that information was more valuable and relatable when given by women who had experienced pregnancy and had children. 'Maybe mums in the same sort of situation, who could show you how to throw something together that's healthy, that isn't really expensive and that takes 15–20 minutes, and it's realistic, something that's realistic.' (Olander 2012, p240) 'I enjoy reading those because it is someone's story. You can take what you want from it.' (Sundstrom 2016, p98)	Methodological limitations: moderate concerns (2 studies with a moderate to low rating based on CASP qualitative checklist)	Low
To explore what type of healthy eating services and support		Relevance: serious concerns (2 studies that did not report any demographic data and limited inclusion/exclusion criteria, unclear how generalisable to the whole UK population)	
prenatal and postnatal women want		Coherence: no concerns (no data that contradict the review finding; no ambiguous data)	
<ul> <li>Sundstrom 2016, Understanding women's feelings towards media for health issues</li> </ul>		Adequacy: minor concerns (2 studies that offered rich data)	

Provision of information about the postnatal health of women

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
2 studies • Olander 2012,	Women held health professionals in high regard and would prefer to receive information from them rather than the internet. They also felt that a reminder of information from health professionals would help keep them on track – particularly for healthy eating behaviour changes. However, women found that health visitors do not always have the time for their queries. 'I think the health visitor should be a bit more helpful, I mean, you go and get your baby weighed and that's it, in, weighed, out. That's all it is. You try and talk and it's like, haven't got time to talk 'cos there's too many babies in the waiting room.' (Olander 2012, p240)	Methodological limitations: moderate concerns (2 studies with a moderate to low rating based on CASP qualitative checklist)	Low
To explore what type of healthy eating services and support		Relevance: serious concerns (2 studies that did not report any demographic data or inclusion/exclusion criteria, unclear how generalisable to the whole UK population)	
prenatal and postnatal women want		Coherence: no concerns (no data that contradict the review finding; no ambiguous data)	
<ul> <li>Weston 2014, To explore the experiences of midwives, antenatal and postnatal women to try to discover their perceptions of the value of internet use in pregnancy</li> </ul>		Adequacy: minor concerns (2 studies that offered rich data)	

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Table 11: Clinical evidence profile for theme 7: communication skills of the person delivering information
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		CERQual Quality Assessment		
Study information	Description of review finding	Assessment of CERQual components	Overall confidence	
Sub-theme 7.1. Need for	or clarity			
1 study • Persson 2011,	studyWomen wanted information, advice and explanations to be given in a clear manner so they can easily understand the message.To report factors'Instead of saying, 'I think you could try and then we can see if it works. Because it can be like this or like that'. I 	Methodological limitations: moderate concerns (1 study with a moderate rating based on CASP qualitative checklist)	Low	
To report factors which influence mothers' sense of		Relevance: minor concerns (1 study with some demographic data, likely to be somewhat generalisable to the whole UK population)		
security during the first postnatal week.		Coherence: no concerns (no data that contradict the review finding; no ambiguous data)		

#### Provision of information about the postnatal health of women

	CERQual Quality Assessment	CERQual Quality Assessment		
Study information	Description of review finding	Assessment of CERQual components	Overall confidence	
		Adequacy: moderate concerns (1 study offering examples of how to increase the sense of security in women by being giv relevant information)		

CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

Table 12:	Clinical evidence	e profile for theme 8: location of information sessions	

		CERQual Quality Assessment	
Study information	Description of review finding	Assessment of CERQual components	Overall confidence
Sub-theme 8.1.Convenien	t locations		
2 studiesWomen wished for information to be delivered in a• Olander 2012, To explore what type of healthy eating serviceslocation that was convenient to them. The preferred location differed depending on the type of information being offered. If away from the home, a childcare service	Methodological limitations: moderate concerns (2 studies with a moderate rating based on CASP qualitative checklist)	Low	
<ul> <li>and support prenatal and postnatal women want</li> <li>Shorey 2015,</li> </ul>	would be required. If within the first month postpartum, at home was preferred. Somewhere you can have a crèche (pp.240, Olander 2012) 'It is very convenient for new moms because a midwife	Relevance: serious concerns (1 study did not report any demographic data or inclusion/exclusion criteria, and 1 study did not include any Caucasian women, therefore unclear how generalisable to the whole UK population)	
To explore the perceptions of primiparas on the contents, delivery andcame to your home and gave you advice and help on the spot, rather than you go out and asking for help with your baby. At home you feel comfortable and you can also ask them more questions and if you are outside you may hurry	Coherence: no concerns (no data that contradict the review finding; no ambiguous data)		
	to come back home so it's very convenient.' (Shorey 2015, p160) 'I felt rested as the midwife came to my house at my convenience to provide me with important information. It was less tiring and very convenient to receive information	Adequacy: minor concerns (2 studies that offered rich data)	

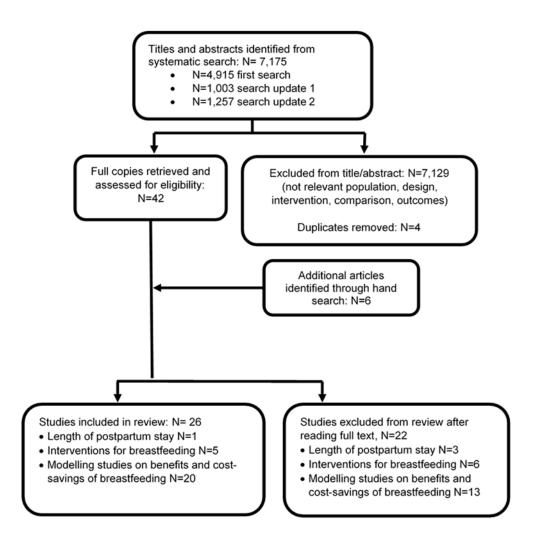
CASP: Critical Appraisal Skills Programme; CERQual: Confidence in the Evidence from Reviews of Qualitative Research

# Appendix G – Economic evidence study selection

# Economic evidence study selection for review question: When and how should information be given to mothers and their partners about postnatal health of the mother?

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 question: When and how should information be given to mothers and their partners about postnatal health of the mother?

No economic evidence was identified which was applicable to this review question.

## Appendix I – Economic evidence profiles

# Economic evidence profiles for review question: When and how should information be given to mothers and their partners about postnatal health of the mother?

No economic evidence was identified which was applicable to this review question.

### Appendix J – Economic analysis

Economic analysis for review question: When and how should information be given to mothers and their partners about postnatal health of the mother?

No economic analysis was conducted for this review question.

### Appendix K – Excluded studies

# Excluded studies for review question: When and how should information be given to mothers and their partners about postnatal health of the mother?

### **Clinical studies**

### Table 13: Excluded studies and reasons for their exclusion

Study	Reason for exclusion
AWHONN news and views. Conquering postpartum depression: AWHONN supports the MOTHERS Act, Nursing for women's health, 11, 422-423, 2007	Study design not relevant
Clinical digest. Information about resuming sex postpartum may allay anxiety in new parents, Nursing Standard, 27, 15-15, 2013	Study design not relevant
Exploring young mothers' experiences with postpartum contraception in Ottawa: results from a multimethods qualitative study, Contraception, 97, 434-438, 2018	Population not relevant
Rethinking engagement: Exploring women's technology use during the perinatal period through a kaupapa maori consistent approach, New Zealand College of Midwives Journal, 55, 20-26, 2019	Population not relevant
Pioneer baby: suggestions for pre- and postnatal health promotion programs from rural English and Spanish-speaking pregnant and postpartum women, Journal of behavioral medicine, 41, 653-667, 2018	Themes not about timing or method of information provision
Informational interventions on paternal outcomes during the perinatal period: A systematic review, Women and Birth, 32, e145-e158, 2019	Study design not relevant
Assessing the Digital Divide among Low-Income Perinatal Women: Opportunities for Provision of Health Information and Counseling, Telemedicine and e Health, 25, 48-54, 2019	Study design not relevant
New parents' experience of information and sense of security related to postnatal care: A systematic review, Sexual and Reproductive Healthcare, 17, 2018	Systematic review not of interest for review - no relevant additional studies identified for review
Afterbirth support provision for women following a traumatic/distressing birth: Survey of NHS hospital trusts in England, Midwifery, 71, 2019	Population not relevant
Aaserud, Tine Gammelgaard, Tveiten, Sidsel, Gjerlaug, Anne Karine, Home visits by midwives in the early postnatal period, Norwegian Journal of Clinical Nursing / Sykepleien Forskning, 1-12, 2017	Themes not about timing or method of information provision
Abraham-Justice, Karen E., Irion, Jean M., Paisley, Brittney, Scott, Lindsey, Williams, Tricia, Herres, Heidi, Pepin, Ashleigh, Prato, Kara, Shifflett, Amy, Neville, Cynthia E., The effects of a postpartum education program on self-care and healthcare-seeking behaviors in mothers, Journal of Women's Health Physical Therapy, 34, 20-21, 2010	Themes not about timing or method of information provision
Artieta-Pinedo, I., Paz-Pascual, C., Grandes, G., Espinosa, M., Framework for the establishment of a feasible, tailored and effective perinatal education programme, BMC Pregnancy & Childbirth, 17, 58, 2017	Themes not about timing or method of information provision

Study	Reason for exclusion
Aston, Megan, Price, Sheri, Monaghan, Joelle, Sim, Meaghan, Hunter, Andrea, Little, Victoria, Navigating and negotiating information and support: Experiences of first-time mothers, Journal of Clinical Nursing, 27, 640-649, 2018	Themes not about timing or method of information provision
Atkinson, Sandra, McNamara, Patricia Mannix, Unconscious collusion: An interpretative phenomenological analysis of the maternity care experiences of women with obesity (BMI 30 kg/m <sup>2</sup> ), Midwifery, 49, 54-64, 2017	Themes not about timing or method of information provision
Baas, Carien I., Erwich, Jan Jaap H. M., Wiegers, Therese A., de Cock, T. Paul, Hutton, Eileen K., Women's Suggestions for Improving Midwifery Care in The Netherlands, Birth: Issues in Perinatal Care, 42, 369-378, 2015	Themes not about timing or method of information provision
Bacchus, L. J., Bullock, L., Sharps, P., Burnett, C., Schminkey, D. L., Buller, A. M., Campbell, J., Infusing Technology Into Perinatal Home Visitation in the United States for Women Experiencing Intimate Partner Violence: Exploring the Interpretive Flexibility of an mHealth Intervention, Journal of medical Internet research, 18, e302, 2016	Themes not about timing or method of information provision
Barkin, J. L., Jani, S., Information Management in New Motherhood: Does the Internet Help or Hinder?, Journal of the American Psychiatric Nurses Association, 22, 475-482, 2016	Themes not about timing or method of information provision
Barkin, Jennifer L., Jani, Smit, Information Management in New Motherhood, Journal of the American Psychiatric Nurses Association, 22, 475-482, 2016	Duplicate of 823761
Beake,S., Rose,V., Bick,D., Weavers,A., Wray,J., A qualitative study of the experiences and expectations of women receiving in-patient postnatal care in one English maternity unit, BMC Pregnancy and Childbirth, 10, 70-, 2010	Themes not about timing or method of information provision
Benn, C., Budge, R. C., White, G. E., Women planning and experiencing pregnancy and childbirth: information needs and sources, Nursing praxis in New Zealand inc, 14, 4-15, 1999	Themes not about timing or method of information provision
Bennett-Day, Sarah, An interpretative phenomenological study of new mothers' experiences of being offered information and advice regarding postnatal thromboprophylaxis, Evidence Based Midwifery, 14, 112-118, 2016	Themes not about timing or method of information provision
Bruinooge, Stephanie Pike, A phenomenological exploration of women's pre- and postnatal use of online social support forums, Dissertation Abstracts International: Section B: The Sciences and Engineering, 68, 3388, 2007	Dissertation abstract
Bull, M., Lawrence, D., A pilot study: Postpartum mothers' perception of the information received in the hospital and its usefulness during the first weeks at home, Journal of Community Health Nursing, 1, 111- 124, 1984	Themes not about timing or method of information provision
Bull, M., Lawrence, D., Mothers' use of knowledge during the first postpartum weeks, Journal of obstetric, gynecologic, and neonatal nursing : JOGNN / NAACOG, 14, 315-320, 1985	Themes not about timing or method of information provision
Buultjens, M., Murphy, G., Robinson, P., Milgrom, J., Monfries, M., Women's experiences of, and attitudes to, maternity education across	Themes not about timing or method of information provision

Study	Reason for exclusion
the perinatal period in Victoria, Australia: A mixed-methods approach, Women and Birth, 30, 406-414, 2017	
Carolan, M., Health literacy and the information needs and dilemmas of first-time mothers over 35 years, Journal of Clinical Nursing, 16, 1162-1172, 2007	Themes not about timing or method of information provision
Collins, C., The discrepancy between the information pregnant women expect and receive in Ireland and the lost opportunity for health promotion and education, International Journal of Health Promotion & Education, 45, 61-66, 2007	Study design not relevant
Cornell, A., McCoy, C., Stampfel, C., Bonzon, E., Verbiest, S., Creating New Strategies to Enhance Postpartum Health and Wellness, Maternal and Child Health Journal, 20, 39-42, 2016	Study design not relevant
Corr, L., Rowe, H., Fisher, J., Mothers' perceptions of primary health- care providers: thematic analysis of responses to open-ended survey questions, Australian Journal of Primary Health, 21, 58-65, 2015	Themes not about timing or method of information provision
Danbjorg, D. B., Wagner, L., Clemensen, J., Do families after early postnatal discharge need new ways to communicate with the hospital? A feasibilility study, Midwifery, 30, 725-732, 2014	Themes not about timing or method of information provision
Danbjørg, D. B., Wagner, L., Kristensen, B. R., Clemensen, J., Intervention among new parents followed up by an interview study exploring their experiences of telemedicine after early postnatal discharge, Midwifery, 31, 574-581, 2015	Themes not about timing or method of information provision
Deave, T., Johnson, D., Ingram, J., Transition to parenthood: The needs of parents in pregnancy and early parenthood, BMC Pregnancy ChildbirthBMC pregnancy and childbirth, 8 (no pagination), 2008	Themes not about timing or method of information provision
Deutsch, F. M., Ruble, D. N., Fleming, A., Brooks-Gunn, J., Stangor, C., Information-seeking and maternal self-definition during the transition to motherhood, Journal of personality and social psychology, 55, 420- 431, 1988	Study design not relevant
Dinsdale, S., Branch, K., Cook, L., Shucksmith, J., "As soon as you've had the baby that's it" a qualitative study of 24 postnatal women on their experience of maternal obesity care pathways, BMC Public Health, 16, 625, 2016	Themes not about timing or method of information provision
Eapen, S. S., Fernandes, P., Effectiveness of an information booklet on home remedial measures for breast engorgement, Nitte University Journal of Health Science, 3, 8-12, 2013	Study design not relevant
Edge, D., 'It's leaflet, leaflet, leaflet then, "see you later"': black Caribbean women's perceptions of perinatal mental health care, British Journal of General Practice, 61, 256-62, 2011	Themes not about timing or method of information provision
Emmanuel, E., Creedy, D., Fraser, J., What mothers want: a postnatal survey, Australian journal of midwifery : professional journal of the Australian College of Midwives Incorporated, 14, 16-20, 2001	Themes not about timing or method of information provision
Fahey, J. O., Shenassa, E., Understanding and Meeting the Needs of Women in the Postpartum Period: The Perinatal Maternal Health Promotion Model, Journal of Midwifery & Womens Health, 58, 613- 621, 2013	Study design not relevant

Study	Reason for exclusion
Fleischman, Ellen, Improving Women's Readiness for Discharge PostpartumProceedings of the 2015 AWHONN Convention, JOGNN: Journal of Obstetric, Gynecologic & Neonatal Nursing, 44, S2-S2, 2015	Themes not about timing or method of information provision
Foley, Suzanne Fitzmyer, The First Months at Home: The Perceived Needs of an American Sample of Postpartum Women, Ph.D., 268 p- 268 p, 2011	Dissertation
Gaskin, K., James, H., Using the Edinburgh Postnatal Depression Scale with learning disabled mothers, Community practitioner : the journal of the Community Practitioners' & Health Visitors' Association, 79, 392-396, 2006	Study design not relevant
George, L., Lack of preparedness: Experiences of first-time mothers, MCN The American Journal of Maternal/Child Nursing, 30, 251-255, 2005	Themes not about timing or method of information provision
Glass, Jennifer L., Riley, Lisa, Family responsive policies and employee retention following childbirth, Social Forces, 76, 1401-1435, 1998	Themes not about timing or method of information provision
Goomis, Sara Elizabeth, Text Messaging: An Innovative Educational Method, Ed.D., 139 p-139 p, 2010	Dissertation
Guerra-Reyes, Lucia, Christie, Vanessa M., Prabhakar, Annu, Harris, Asia L., Siek, Katie A., Postpartum health information seeking using mobile phones: experiences of low- income mothers, MIDIRS Midwifery Digest, 27, 216-216, 2017	Abstract
Guerra-Reyes, Lucia, Christie, Vanessa, Prabhakar, Annu, Harris, Asia, Siek, Katie, Postpartum Health Information Seeking Using Mobile Phones: Experiences of Low-Income Mothers, Maternal & Child Health Journal, 20, 13-21, 2016	Themes not about timing or method of information provision
Hearn, L., Miller, M., Fletcher, A., Online healthy lifestyle support in the perinatal period: what do women want and do they use it?, Australian Journal of Primary Health, 19, 313-8, 2013	Population not relevant
Heberlein, E. C., Picklesimer, A. H., Billings, D. L., Covington-Kolb, S., Farber, N., Frongillo, E. A., Qualitative Comparison of Women's Perspectives on the Functions and Benefits of Group and Individual Prenatal Care, Journal of Midwifery & Women's Health, 61, 224-34, 2016	Themes not about timing or method of information provision
Henry,A., Nand,S.L., Intrapartum pain management at the Royal Hospital for Women, Australian and New Zealand Journal of Obstetrics and Gynaecology, 44, 307-313, 2004	Study design not relevant
Henry,A., Nand,S.L., Women's antenatal knowledge and plans regarding intrapartum pain management at the Royal Hospital for Women, Australian and New Zealand Journal of Obstetrics and Gynaecology, 44, 314-317, 2004	Study design not relevant
Hermansen, I. L., O'Connell, B., Gaskin, C. J., Are Postpartum Women in Denmark Being Given Helpful Information About Urinary Incontinence and Pelvic Floor Exercises?, Journal of Midwifery and Women's Health, 55, 171-174, 2010	Study design not relevant
Hiser, P. L., Maternal concerns during the early postpartum, Journal of the American Academy of Nurse Practitioners, 3, 166-173, 1991	Study design not relevant

Study	Reason for exclusion
Hjelm,K., Bard,K., Berntorp,K., Apelqvist,J., Beliefs about health and illness postpartum in women born in Sweden and the Middle East, Midwifery, 25, 564-575, 2009	Themes not about timing or method of information provision
Howell, E. A., Lack of patient preparation for the postpartum period and patients' satisfaction with their obstetric clinicians, Obstetrics & Gynecology, 115, 284-9, 2010	Study design not relevant
Inglis, S., Accessing a debriefing service following birth, British Journal of Midwifery, 10, 368-371, 2002	Themes not about timing or method of information provision
Kobayashi, H., Sado, T., Satisfaction of a new telephone consultation service for prenatal and postnatal health care, Journal of Obstetrics and Gynaecology Research, 45, 1376-1381, 2019	Study design not relevant
Kurth, E., Krahenbuhl, K., Eicher, M., Rodmann, S., Folmli, L., Conzelmann, C., Zemp, E., Safe start at home: what parents of newborns need after early discharge from hospital - a focus group study, BMC health services research, 16, 2016	Themes not about timing or method of information provision
Lavender, T., Moffat, H., Rixon, S., Research. Do we provide information to women in the best way?, British Journal of Midwifery, 8, 769-775, 2000	Themes not about timing or method of information provision
Little, S. H., Motohara, S., Miyazaki, K., Arato, N., Fetters, M. D., Prenatal group visit program for a population with limited English proficiency, Journal of the American Board of Family Medicine: JABFMJ Am Board Fam Med, 26, 728-37, 2013	Themes not about timing or method of information provision
Logsdon, M. C., Lauf, A., Stikes, R., Revels, A., Vickers-Smith, R., Partnering with New Mothers to Develop a Smart Phone App to Prevent Maternal Mortality After Hospital Discharge: A Pilot Study, Journal of advanced nursing., 07, 2019	Themes not about timing or method of information provision
Malouf, R., McLeish, J., Ryan, S., Gray, R., Redshaw, M., 'We both just wanted to be normal parents': A qualitative study of the experience of maternity care for women with learning disability, BMJ Open, 7 (3) (no pagination), 2017	Themes not about timing or method of information provision
Martin, M., Women's judgments and attitudes about the quality and quantity of postpartum teaching, Journal of Undergraduate Nursing Scholarship, 7, 6p-6p, 2005	Study design not relevant
Martinez-Galiano, J. M., Delgado-Rodriguez, M., Effectiveness of the professional who carries out the health education program: Perinatal outcomes, International Journal of Women's Health, 6, 329-334, 2014	Study design not relevant
Mattern, E., Lohmann, S., Ayerle, G. M., Experiences and wishes of women regarding systemic aspects of midwifery care in Germany: A qualitative study with focus groups, BMC Pregnancy and Childbirth, 17 (1) (no pagination), 2017	Themes not about timing or method of information provision
McCarter, D., MacLeod, C. E., What Do Women Want? Looking Beyond Patient Satisfaction, Nursing for women's health., 28, 2019	Themes not about timing or method of information provision
McCarter-Spaulding, Deborah, Spencer, Becky, Mothers' Needs and Expectations for Postpartum Education, JOGNN: Journal of Obstetric, Gynecologic & Neonatal Nursing, 45, S43-S43, 2016	Conference Abstract
McComish, J. F., Visger, J. M., Domains of postpartum doula care and maternal responsiveness and competence, JOGNN - Journal of Obstetric, Gynecologic, and Neonatal Nursing, 38, 148-156, 2009	Themes not about timing or method of information provision

Study	Reason for exclusion
McKellar, L. V., Pincombe, J., Henderson, A. M., Congratulations you're a mother: a strategy for enhancing postnatal education for first-time mothers investigated through an action research cycle, Australian journal of midwifery : professional journal of the Australian College of Midwives Incorporated, 15, 24-31, 2002	Themes not about timing or method of information provision
McKellar,L.V., Pincombe,J.I., Henderson,A.M., Insights from Australian parents into educational experiences in the early postnatal period, Midwifery, 22, 356-364, 2006	Study design not relevant
McKinnon, L. C., Prosser, S. J., Miller, Y. D., What women want: Qualitative analysis of consumer evaluations of maternity care in Queensland, Australia, BMC Pregnancy and Childbirth, 14 (1) (no pagination), 2014	Themes not about timing or method of information provision
McVeigh,C., Motherhood experiences from the perspective of first- time mothers, Clinical Nursing Research, 6, 335-348, 1997	Themes not about timing or method of information provision
Mercado, A., Marquez, B., Abrams, B., Phipps, M. G., Wing, R. R., Phelan, S., Where Do Women Get Advice About Weight, Eating, and Physical Activity During Pregnancy?, Journal of women's health (2002), 26, 951-956, 2017	Themes not about timing or method of information provision
Meringer, Dona L., McGovern, Beth, Amin, Kate, Postpartum Unit Modifies Delivery of Care to Enhance Readiness, JOGNN: Journal of Obstetric, Gynecologic & Neonatal Nursing, 44, S28-S28, 2015	Conference Abstract
Miller, T., Shifting perceptions of expert knowledge: Transition to motherhood, Human Fertility, 6, 142-146, 2003	Themes not about timing or method of information provision
Morawska, A., Weston, K., Bowd, C., Early Parenting Support and Information: A Consumer Perspective, Infant Mental Health Journal, 39, 145-152, 2018	Study design not relevant
O'Cathain,A., Walters,S.J., Nicholl,J.P., Thomas,K.J., Kirkham,M., McDonald,H., Kaufman,K., Patient information leaflets did not promote informed choice and active decision-making in maternity care, Evidence-based Obstetrics and Gynecology, 4, 173-174, 2002	Study design not relevant
Olander, E. K., Aquino, M. R. J. R., Chhoa, C., Harris, E., Lee, S., Bryar, R. M., Women's views of continuity of information provided during and after pregnancy: A qualitative interview study, Health & social care in the community., 15, 2019	Data saturation - reports on themes of information consistency
Osma, J., Barrera, A. Z., Ramphos, E., Are Pregnant and Postpartum Women Interested in Health-Related Apps? Implications for the Prevention of Perinatal Depression, Cyberpsychology, behavior and social networking, 19, 412-415, 2016	Study design not relevant
Piejko, E., The postpartum visitwhy wait 6 weeks?, Australian family physician, 35, 674-678, 2006	Study design not relevant
Polit, M. E., O'Beirne, M., A Mom & Me program, Home healthcare nurse, 15, 427-429, 1997	Study design not relevant
Post, Caron Sue, The role of information-seeking in the transition to motherhood: Relations with adjustment, life tasks and expectations, Dissertation Abstracts International: Section B: The Sciences and Engineering, 58, 6820, 1998	Dissertation abstract
Price, S. L., Aston, M., Monaghan, J., Sim, M., Tomblin Murphy, G., Etowa, J., Pickles, M., Hunter, A., Little, V., Maternal Knowing and	Themes not about timing or method of information provision

Study	Reason for exclusion
Social Networks: Understanding First-Time Mothers' Search for Information and Support Through Online and Offline Social Networks, Qualitative health research, 28, 1552-1563, 2018	
Reitmanova, S., Gustafson, D. L., "They can't understand it": maternity health and care needs of immigrant Muslim women in St. John's, Newfoundland, Maternal & Child Health Journal, 12, 101-11, 2008	Themes not about timing or method of information provision
Robb, Y., McInery, D., Hollins Martin, C. J., Exploration of the experiences of young mothers seeking and accessing health services, Journal of Reproductive and Infant Psychology, 31, 399-412, 2013	Themes not about timing or method of information provision
Robinson, Aicia B., Exploring maternal well-being and internet social support: A cross-sectional study on perinatal depression, anxiety, mindfulness, and self-compassion, Dissertation Abstracts International: Section B: The Sciences and Engineering, 77, No Pagination Specified, 2016	Dissertation abstract
Rowe, H. J., Holton, S., Fisher, J. R. W., Postpartum emotional support: a qualitative study of women's and men's anticipated needs and preferred sources, Australian Journal of Primary Health, 19, 46-52, 2013	Themes not about timing or method of information provision
Sandin-Bojo,A.K., Kvist,L.J., Berg,M., Larsson,B.W., What is, could be better: Swedish women's perceptions of their intrapartal care during planned vaginal birth, International Journal of Health Care Quality Assurance, 24, 81-95, 2011	Study design not relevant
Sarathi, S., Hemavathy, V., Effectiveness of educational intervention package regarding postpartum management, Research Journal of Pharmaceutical, Biological and Chemical Sciences, 7, 373-376, 2016	Study design not relevant
Schneider, Z., Antenatal education classes in Victoria: what the women said, Australian journal of midwifery : professional journal of the Australian College of Midwives Incorporated, 14, 14-21, 2001	Themes not about timing or method of information provision
Singh,D., Newburn,M., Postnatal care in the month after birth, Practising Midwife, 4, 22-25, 2001	Themes not about timing or method of information provision
Sink, K. K., Perceptions, informational needs, and feelings of competency of new parents, Ph.D., 135 p-135 p, 2001	Dissertation
Slomian, J., Emonts, P., Vigneron, L., Acconcia, A., Glowacz, F., Reginster, J. Y., Oumourgh, M., Bruyere, O., Identifying maternal needs following childbirth: A qualitative study among mothers, fathers and professionals, BMC Pregnancy and Childbirth, 17, 213, 2017	Themes not about timing or method of information provision
Smith, S. A., Information giving: effects on birth outcomes and patient satisfaction, International Electronic Journal of Health Education, 1, 135-145, 1998	Study design not relevant
Sword, W., Watt, S., Learning needs of postpartum women: Does socioeconomic status matter?, Birth, 32, 86-92, 2005	Study design not relevant
Thompson, J. F., Ford, J. B., Raynes-Greenow, C. H., Roberts, C. L., Ellwood, D. A., Women's experiences of care and their concerns and needs following a significant primary postpartum hemorrhage, Birth, 38, 327-35, 2011	Themes not about timing or method of information provision
Timmer-Hawck,L.F., The relationship between maternal receptivity to instruction and stimulus overload for high risk mothers during the immediate postpartum period, -210, 1988	Unpublished PhD paper

Study	Reason for exclusion
Van Den Broek, N. R., Falconer, A. D., Maternal mortality and Millennium Development Goal 5, British Medical Bulletin, 99, 25-38, 2011	Study design not relevant
van der Pligt, Paige, Ball, Kylie, Hesketh, Kylie D., Crawford, David, Teychenne, Megan, Campbell, Karen, The views of first time mothers completing an intervention to reduce postpartum weight retention: A qualitative evaluation of the mums OnLiNE study, Midwifery, 56, 23- 28, 2018	Themes not about timing or method of information provision
Wagner, Debra Lynn, Patient satisfaction with postpartum teaching methods used by nurses, Ph.D., 146 p-146 p, 2009	Dissertation
Walker, L. O., Im, E. O., Vaughan, M. W., Communication Technologies and Maternal Interest in Health-Promotion Information about Postpartum Weight and Parenting Practices, JOGNN - Journal of Obstetric, Gynecologic, and Neonatal Nursing, 41, 201-215, 2012	Study design not relevant
Ward,C., Mitchell,A., The experience of early motherhood implications for care, Evidence Based Midwifery, 2, 15-19, 2004	Themes not about timing or method of information provision
Willcox, J. C., Campbell, K. J., McCarthy, E. A., Lappas, M., Ball, K., Crawford, D., Shub, A., Wilkinson, S. A., Gestational weight gain information: seeking and sources among pregnant women, BMC Pregnancy & Childbirth, 15, 164, 2015	Study design not relevant
Woodward, B. M., Zadoroznyj, M., Benoit, C., Beyond birth: Women's concerns about post-birth care in an Australian urban community, Women & Birth: Journal of the Australian College of Midwives, 29, 153-9, 2016	Themes not about timing or method of information provision
Yee, W. H., Sauve, R., What information do parents want from the antenatal consultation?, Paediatrics & Child Health, 12, 191-6, 2007	Study design not relevant
Zabari, M., Suresh, G., Tomlinson, M., Lavin, J. P., Jr., Larison, K., Halamek, L., Schriefer, J. A., Implementation and case-study results of potentially better practices for collaboration between obstetrics and neonatology to achieve improved perinatal outcomes, Pediatrics, 118 Suppl 2, S153-8, 2006	Study design not relevant
Ziabakhsh, S., Fernandez, R., Black, B., Brito, G., Voices of Postpartum Women: Exploring Canadian Women's Experiences of Inpatient Postpartum Care, Journal of Obstetrics and Gynaecology Canada, 40, 1424-1436, 2018	Themes not about timing or method of information provision

### **Economic studies**

No economic evidence was identified for this review.

### Appendix L – Research recommendations

# Research recommendations for review question: When and how should information be given to mothers and their partners about postnatal health of the mother?

No research recommendations were made for this review question.