



# The development of an intervention to support midwives in addressing health behaviours with pregnant women

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# Background to PhD

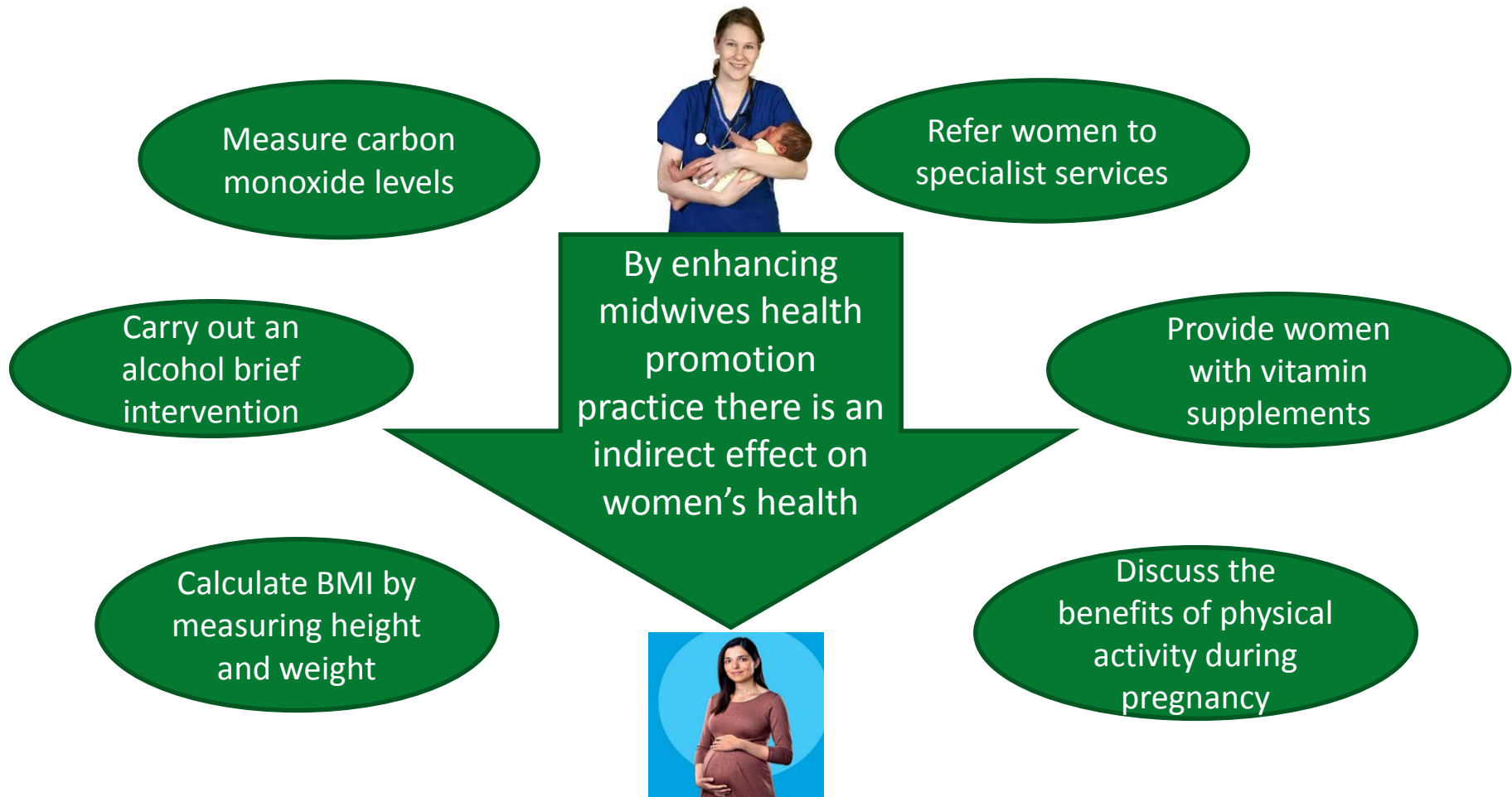
- The development of an intervention to support midwives in addressing health behaviours with pregnant women

Increased risk of miscarriage, gestational diabetes, pre-eclampsia, venous

thrombosis, prolonged labour,

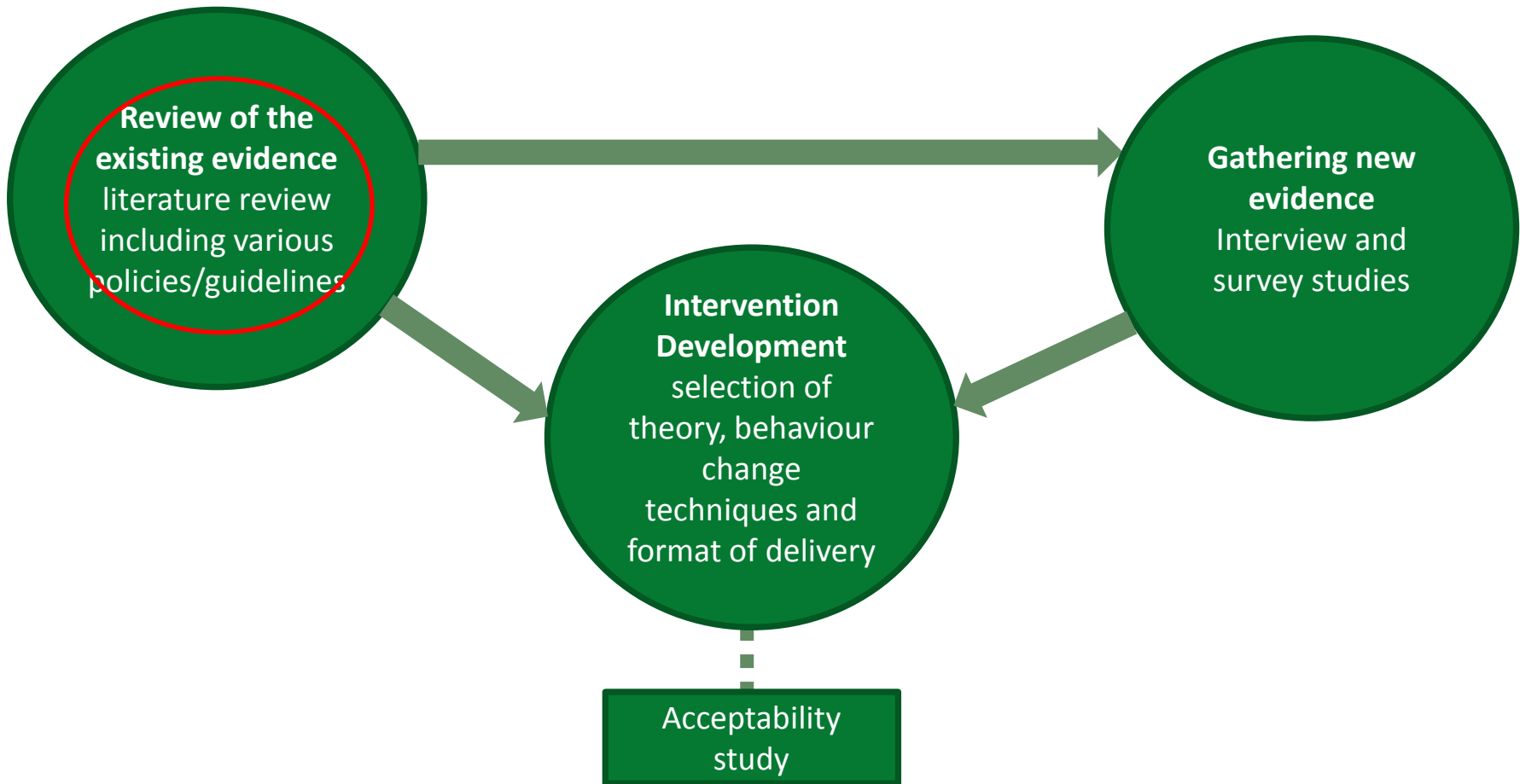
In Scotland, maternity care for a woman whose BMI is within the obese category costs the NHS an extra £202.50. For women within the severely obese range (BMI of 35 or more), this additional cost rises to £350.80 (Denison et al., 2014)

# Midwives' Health Promotion Practice = all the tasks midwives are asked to do to promote health during pregnancy



Secondary focus= women's health behaviours during pregnancy

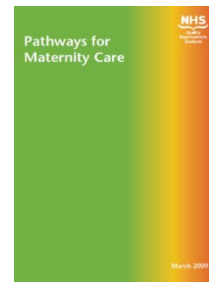
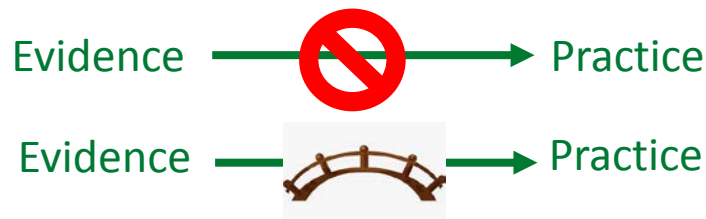
# PhD overview



# Review of the existing evidence



- Aim(i): identify documentation containing information about midwives' health promotion practice
- Different philosophies underpinning various reports, strategies and guidelines
- Aim (ii): identify if there are interventions to support midwives' health promotion practice
- No interventions to support midwives



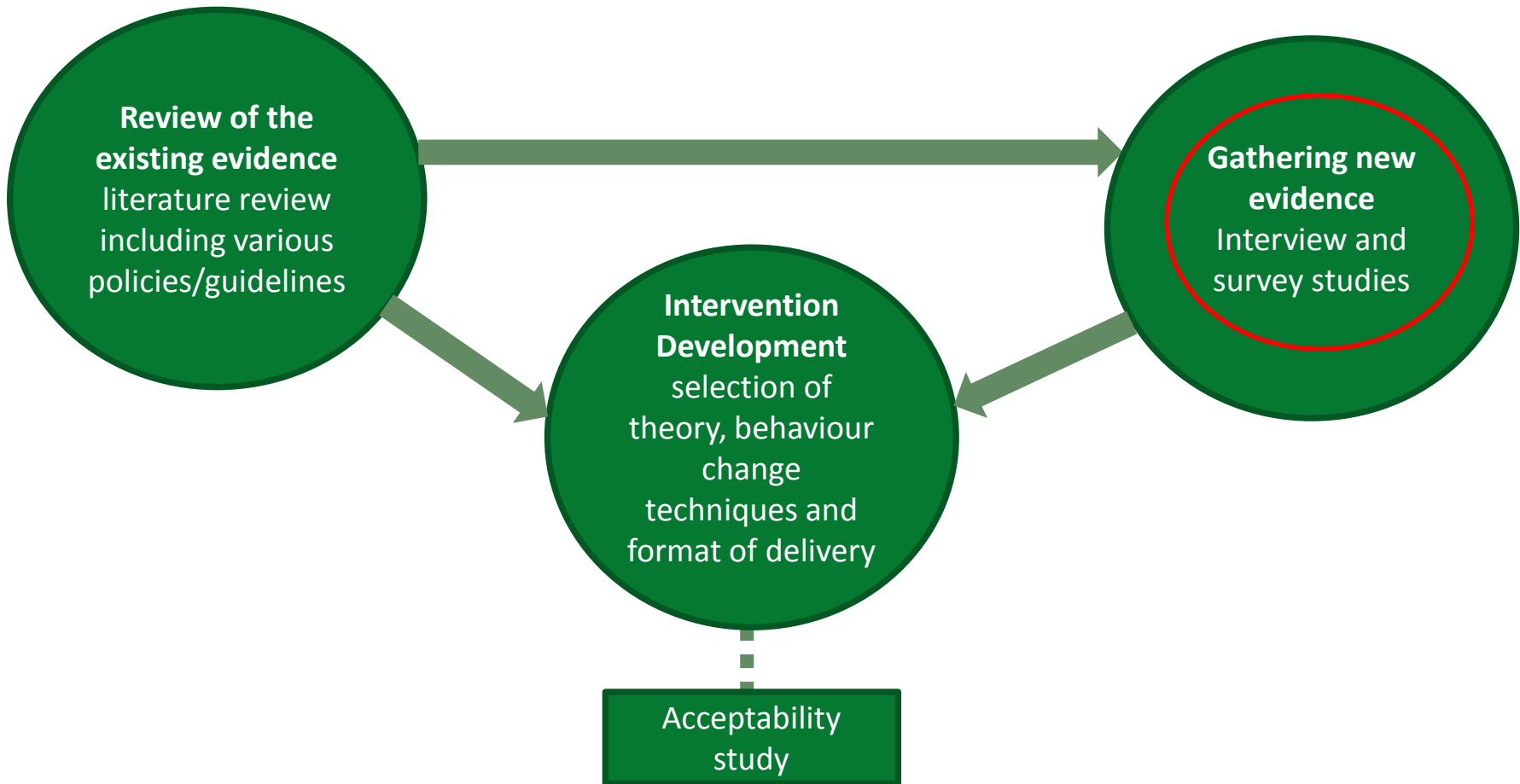
Reducing Antenatal Health Inequalities

Outcome Focused Evidence into Action Guidance

January 2011



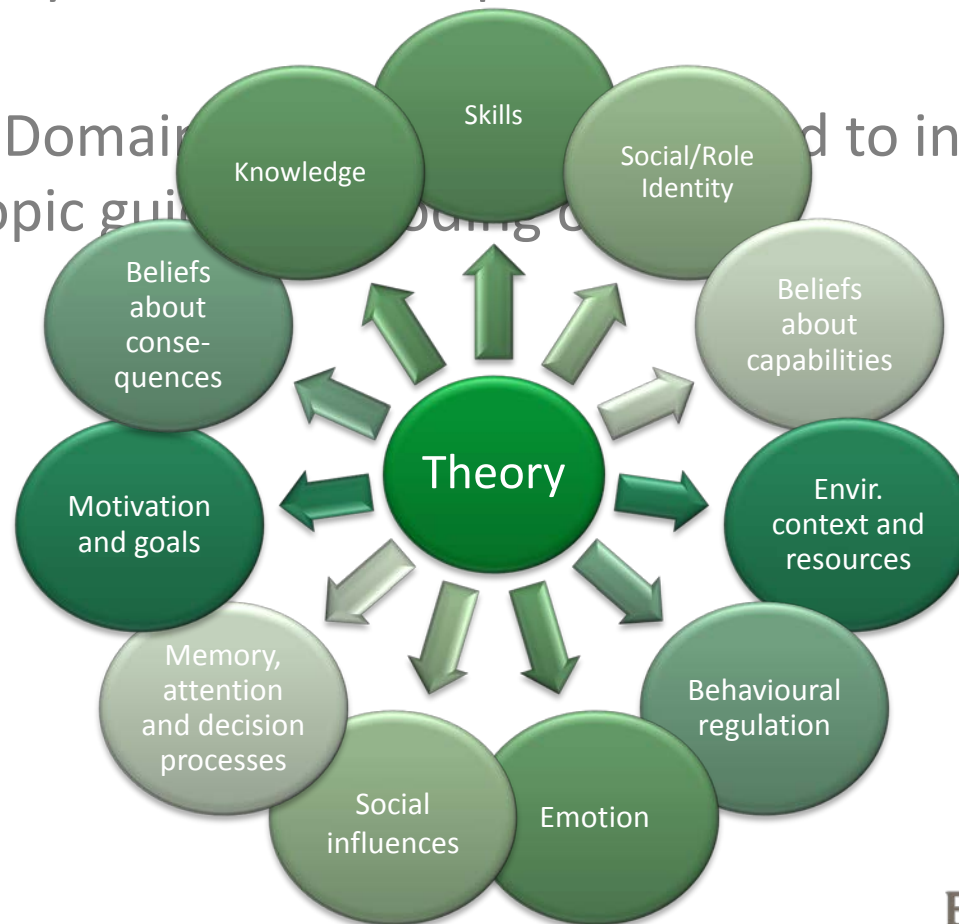
# PhD overview



# Gathering new evidence: interview study to investigate midwives' beliefs about their health promotion practice



- 11 community midwives took part in one-to-one semi-structured interviews
- Theoretical Domains Framework (TDF) was used to inform the interview topic guide



## Examples of barriers

- Number of tasks, cognitive resources, quality of relationships with pregnant women, midwives' own health status and organisational issues

*"I'm exhausted after a clinic because you feel as if you want to have your senses hyper alert" (M9)*

*"We're not getting the same chance to see the same women again so I find it a bit harder to address things" (M1)*

*"I think midwives find it really difficult because if you're big yourself they're looking at you thinking "well, she's got a cheek", if you're small they're looking at you thinking "you've never had a problem in your life" and so I think it's a really difficult one and I think a lot of midwives don't talk about it" (M10)*



# Examples of facilitators

- Motivation and strategies

*“So what bit for you do we need to look at?”, ‘cause there’s very few people that need absolutely, well some of them do need absolutely everything, but if they do it’s about chipping away at it. I think you have to think let’s look at this wee bit by bit.” (M9)*

*“I have to say I do it as a multitask. I’ll be testing the urine while I’m asking about how they feel in pregnancy and had they had any sickness and how they’re getting on with eating and things like that. I’ll be multi-tasking the whole way.” (M7)*

*“I think it’s a huge window of opportunity for midwives” (M5)*

# Example of mixed views

- Whether certain health promotion topics should be addressed by other health professionals prior to pregnancy, women's receptiveness to health promotion during pregnancy

*"Most women are quite receptive to that because they know they're pregnant and know it's not just about their health anymore" (M11)*

*"It seems to be that everything is piled onto this booking visit and I don't think it's fair on the women" (M3)*

# Gathering new evidence: online survey study to investigate the factors influencing midwives' health promotion practice

- 505 midwives completed an online survey:
  - 1) Self-report of performing health promotion practice
  - 2) Barriers and facilitators to performing health promotion practice e.g. *"I am confident in my ability"*
  - 3) Demographics (e.g. years of experience)
  - 4) Health status (BMI) & health behaviours (PA levels)
  - 5) Strategies e.g. how do midwives prioritise which health promotion topics to focus on
  - 6) Perceived support needs e.g. type of support
  - 7) Open-ended qualitative questions



# What factors influence midwives' health promotion practice?

Predictors of health promotion practice:

- Years of experience as a qualified midwife
- Job role
- **Midwives confidence**
- **Midwives intrinsic drive**
- **Midwives feelings of being supported**

# What factors influence midwives' health promotion practice?

**Confidence:** *"More confidence in some areas than others. Less confidence in oral health and sexual health as less focus on training and resources for these areas."*

**Support in carrying out health promotion practice:** *"Much of the health promotion advice we are told to give feels painfully out of date, particularly in relation to things like nutrition (barely any training given on this as undergraduates) and advice does not keep up enough with changing attitudes to health (e.g. things like veganism)."*

**Motivation:** *"I believe as midwives we have a great opportunity to encourage healthy lifestyles not only to the woman but her family also"*

# How do midwives prioritise which health promotion topics to focus on?

- *“When there is not enough time to cover all Health Promotion Topics I focus on the topic(s) that...”*

Strategies	Mean	SD
The midwife perceives as most important	4.3	1.0
The woman wants to focus on	4.1	1.1
The midwife is the most appropriate professional to advise	3.9	1.1
Have a reliable and high-quality service to refer to	3.7	1.1
The midwife knows there is a straightforward referral pathway	3.6	1.2
The midwife can cover in the available time but not in any detail	3.4	1.2
The midwife is most comfortable speaking about	3.2	1.4
Least likely to involve follow-up	2.2	1.3

# Other strategies midwives use to perform their health promotion practice

- Two thirds of midwives provided free text responses of “other” strategies used when there is not enough time to address all health promotion topics

Other Strategies	%
Signposting to written/online materials and support groups	36
Follow-up at subsequent appointment	13
Combinations e.g. signposting and follow-up	9
Relevant to the woman	5
Other	2
Referral service	1
Make time/ over run the appointment	1

# What type of support would midwives like to help them perform their health promotion practice?

- 72% of midwives wanted more support in carrying out their health promotion practice
- Type of support: 60% strongly agreed that they wanted health promotion updates from services, new resources and training
- Delivery channel: 72% in person, 59% email, 54% App
- Delivery method: 55% wanted a mixture of 1:1 and group support



RESEARCH

Open Access

# Investigating midwives' barriers and facilitators to multiple health promotion practice behaviours: a qualitative study using the theoretical domains framework



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## Abstract

**Background:** In addition to their more traditional clinical role, midwives are expected to perform various health promotion practice behaviours (HePPBes) such as informing pregnant women about the benefits of physical activity during pregnancy and asking women about their alcohol consumption. There is evidence to suggest several barriers exist to performing HePPBes. The aim of the study was to investigate the barriers and facilitators midwives perceive to undertaking HePPBes.

**Methods:** The research comprised of two studies.

Study 1: midwives based in a community setting ( $N = 11$ ) took part in semi-structured interviews underpinned by the theoretical domains framework (TDF). Interviews were analysed using a direct content analysis approach to identify important barriers or facilitators to undertaking HePPBes.

Study 2: midwives ( $N = 505$ ) completed an online questionnaire assessing views on their HePPBes including free text responses ( $n = 61$ ) which were coded into TDF domains. Study 2 confirmed and supplemented the barriers and facilitators identified in study 1.

**Results:** Midwives' perceived a multitude of barriers and facilitators to carrying out HePPBes. Key barriers were requirements to perform an increasing amount of HePPBes on top of existing clinical work load, midwives' cognitive resources, the quality of relationships with pregnant women, a lack of continuity of care and difficulty accessing appropriate training. Key facilitators included midwives' motivation to support pregnant women to address their health. Study 1 highlighted strategies that midwives use to overcome the barriers they face in carrying out their HePPBes.

**Conclusions:** Despite high levels of motivation to carry out their health promotion practice, midwives perceive numerous barriers to carrying out these tasks in a timely and effective manner. Interventions that support midwives by addressing key barriers and facilitators to help pregnant women address their health behaviours are urgently needed.

**Keywords:** Midwives, Health promotion, Multiple health behaviours, Theoretical domains framework

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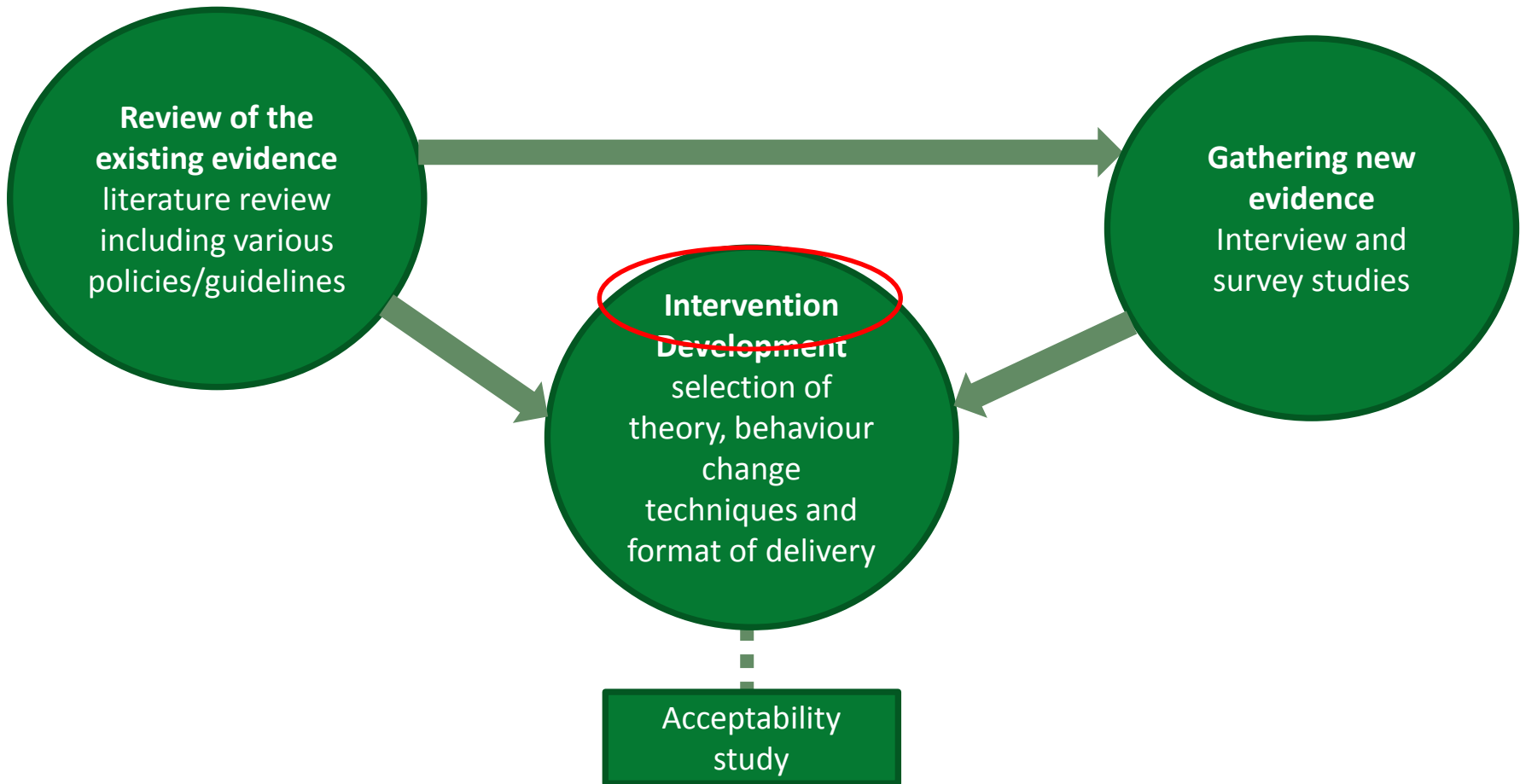
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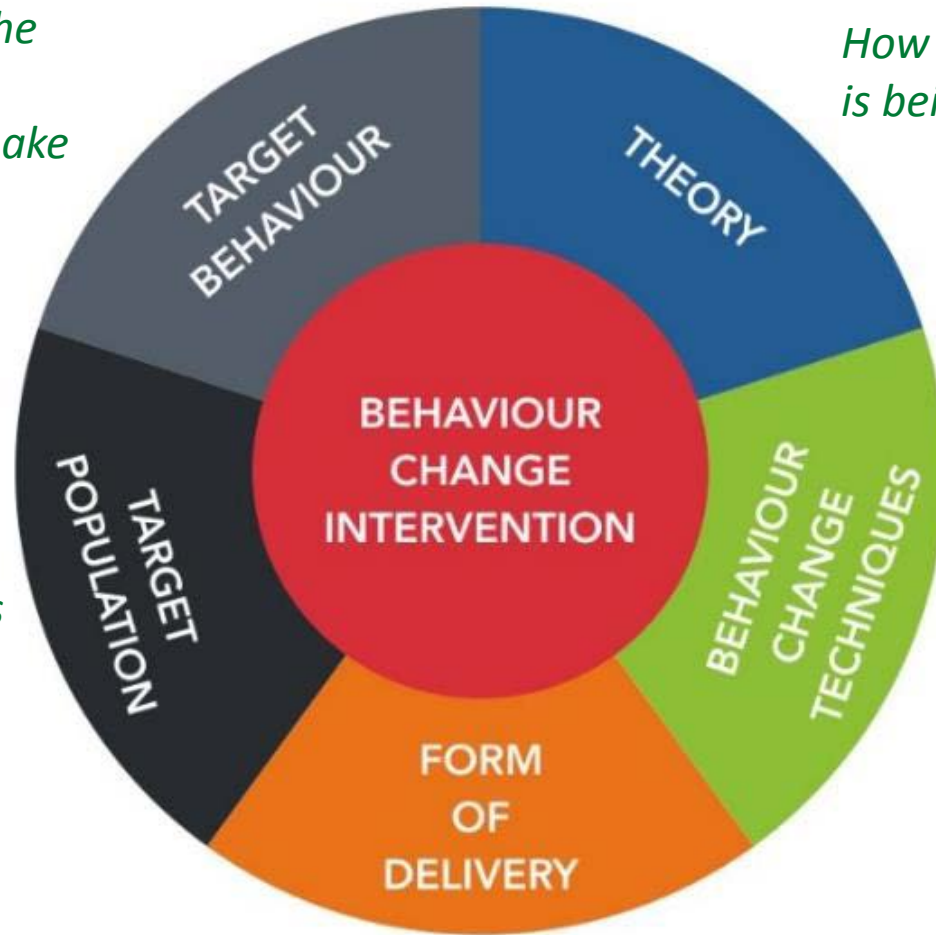
# PhD overview



# Flex Five

*What changes the intervention is attempting to make*

*How the intervention is being delivered*

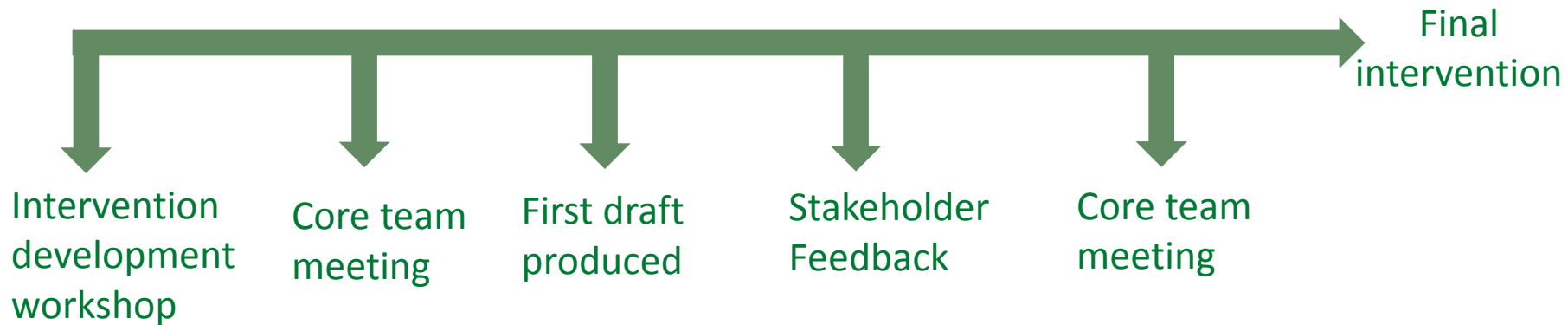


*Who the intervention is aimed at*

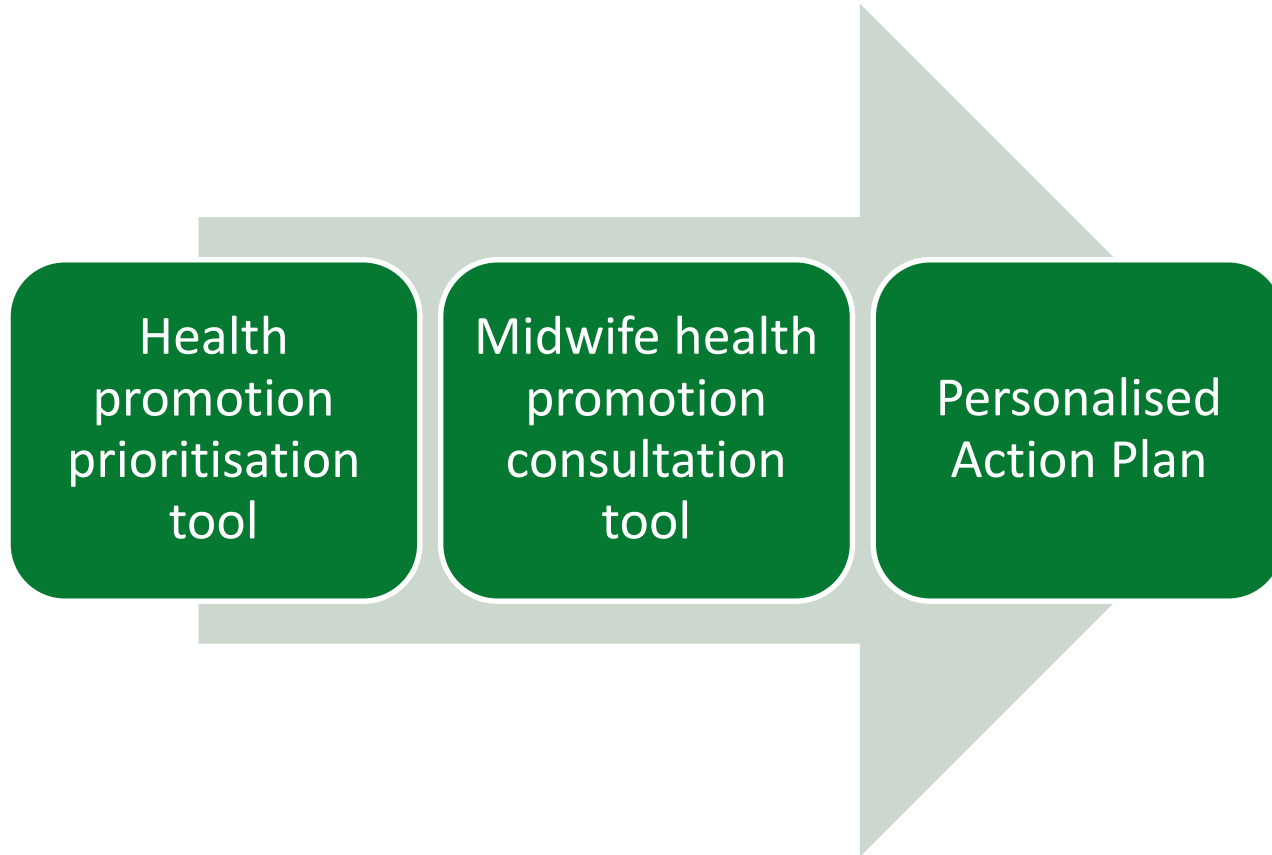
*What the intervention includes*

*How the intervention is supposed to work*

# Format of delivery- stakeholder input



# Midwife health promotion toolkit...



# Tool 1: Health promotion prioritisation tool (pre-consultation)

**HEALTH DURING PREGNANCY**

WHAT MATTERS TO ME?

WEIGHT MANAGEMENT

PHYSICAL ACTIVITY

DIET

ORAL HEALTH

SUBSTANCE USE

SMOKING

ALCOHOL CONSUMPTION

During your appointments your midwife will discuss a lot of health topics with you.

Before meeting your midwife, think about what topics matter most to you.

**For example, if you want to talk about your diet then please tick the relevant box.**

There is space to write any questions, worries, concerns, or views that you may have.



**PHYSICAL ACTIVITY**

very important to me

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(Ready Steady Baby - page 8-9)



**ORAL HEALTH**

very important to me

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(Ready Steady Baby - page 46)



**ALCOHOL CONSUMPTION**

very important to me

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(Ready Steady Baby - page 12)

More information is available at [readysteadybaby.org.uk](http://readysteadybaby.org.uk)



**SMOKING**

very important to me

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(Ready Steady Baby - page 10-11)



**SUBSTANCE USE**

very important to me

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(Ready Steady Baby - page 13)



**DIET**

very important to me

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(Ready Steady Baby - page 15-17)



**WEIGHT MANAGEMENT**

very important to me

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(Ready Steady Baby - pages 54-55)



**SOMETHING ELSE THAT MATTERS TO ME...**

(for example, if you are feeling anxious or depressed you may wish to discuss this with your midwife)

very important to me

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# Tool 1: Health promotion prioritisation tool (pre-consultation)



During your appointments your midwife will discuss a lot of health topics with you.

Before meeting your midwife, think about what topics matter most to you.

**For example, if you want to talk about your diet then please tick the relevant box.**

There is space to write any questions, worries, concerns, or views that you may have.



## PHYSICAL ACTIVITY

very important to me

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(Ready Steady Baby - page 8-9)

# Tool 1: Health promotion prioritisation tool potential impacts

**Midwife:** may reduce the time spent making decisions about what topics to focus on, structure e.g. ask the woman to rate her top topic

**Pregnant woman:** provides an opportunity for women to shape their antenatal care before they have met their midwife

**Other impacts:** woman-midwife relationship, enhance continuity of care by providing a resource that can be used longitudinally throughout pregnancy, literacy/language barriers



# Tool 2: Midwife health promotion consultation tool (during consultation)

## MIDWIFE HEALTH PROMOTION CONSULTATION TOOL

**WHAT MATTERS TO THE WOMAN?**

- WEIGHT MANAGEMENT
- PHYSICAL ACTIVITY
- DIET
- ORAL HEALTH
- SUBSTANCE USE
- SMOKING
- ALCOHOL CONSUMPTION

During a busy antenatal appointment, it can be difficult to remember all the health promotion topics you have to address with women. Try keeping this tool nearby as a reminder.

## 12 WAYS TO SUPPORT YOUR HEALTH PROMOTION PRACTICE

from midwives and behavioural science recommendations

- Taking time to reflect
- Woman's choice
- Check what she already knows
- Chipping
- Dipping
- Use of materials
- Goal setting
- Self-monitoring
- Planning
- Signpost
- Teach-back
- Social support

## 12 WAYS TO SUPPORT YOUR HEALTH PROMOTION PRACTICE

You may already be using some or all of these top tips but try thinking about how you could use them as a reminder.

- Woman's choice:** At the beginning of the appointment, ask the woman if there are any topics that are important to her. You could also refer to the *Ready Steady Baby* pregnancy tool and check to see if she has identified any topics as important.
- Check what she already knows:** Save time by drawing on the woman's knowledge. Ask questions like: "Can you tell me what you know about exercising during pregnancy?" Then provide any additional information that she does not have.
- Chipping:** Rome wasn't built in a day. Sometimes big issues take a lot of time and effort to address for the woman. See yourself as chipping away at it and try not to expect too much all at once.
- Dipping:** Identify the topics that are most relevant to the women and dip into them regularly. For instance, you could "dip" into topics identified at the booking as important at follow-up appointments.
- Use of materials:** Use the SW+MR, *Ready Steady Baby* or this tool as a prompt to help you remember what health promotion topics you are required to address.
- Goal setting:** Try setting yourself specific goals. For example, you could set the goal that you are going to ask each woman at the start of their appointment if they have used the health promotion tool to decide what topics matter to them most.

- Self-monitoring:** Review the information and advice you are giving out. For instance, at the end of each clinic, read over any health behaviour change personalised plans you have given out.
- Planning:** Think about when and how you could use the personalised plan, during antenatal appointments, to help the woman decide what she will do to support her health behaviours. For example, she could read specific pages in *Ready Steady Baby* on the train while travelling home from work (check out other examples in the personalised plan).
- Signpost:** Keep a list of information to refer women to, such as high-quality websites, include local information about support groups or services. You could ask your midwifery colleagues for suggestions of what to put on the list.
- Teach-back:** Check the woman's understanding of what you have discussed with her. For instance you could say: "We discussed a lot today. Can you tell me what you found most important?" More information is available at [www.scottishhealthcouncil.org](http://www.scottishhealthcouncil.org).
- Social Support:** Try discussing health promotion practice with other midwives. For example, you could ask your colleagues how they address health promotion topics or if they can recommend any useful resources.
- Taking time to reflect:** Try reflecting about why you are helping women to change their health promotion behaviours. The MAP Model of Health Behaviour Change (more information is available at [www.nhs.uk/scot.nhs.uk](http://www.nhs.uk/scot.nhs.uk)) can help to support you in developing your health behaviour change skills.

UNIVERSITY of STIRLING

# Health promotion consultation tool: front cover



# 12 WAYS TO SUPPORT YOUR HEALTH PROMOTION PRACTICE

from midwives and behavioural science recommendations



## Health promotion consultation tool: strategies

**Chipping:** Rome wasn't built in a day. Sometimes big issues take a lot of time and effort to address for the woman. See yourself as chipping away at it and try not to expect too much all at once.

**Dipping:** Identify the topics that are most relevant to the woman and dip into them regularly. For instance, you could "dip" into topics identified at the booking as important at follow-up appointments.

## Tool 2: Midwife health promotion consultation tool potential impact

**Midwife:** the availability of a prompt and/or strategies to assist midwives may reduce their cognitive load during the appointment.

# Tool 3: Personalised action plan (end of consultation)



Sometimes in a busy antenatal appointment, with so many competing priorities, it can be challenging to support women's health behaviour change.

Developed from recommendations by midwives and feedback from women, the personalised plan is designed to provide the woman with a hand-held reminder of health behaviour change planned during an antenatal appointment.

You could use this tool by asking the woman if she would like a personalised reminder of what has been discussed regarding health behaviour change. If she would like a copy, then you could write the plan in this pad, tear it off and give it to her. There will be a copy underneath for you to keep too.

# Tool 3: Personalised action plan (end of consultation)

**For example**, if you were helping a woman to become more physically active during pregnancy you could collaboratively agree on a plan like the following examples:

- **Plan the what, when and where of what you and the woman have agreed she will do**  
*"We have agreed: you are going to read Ready Steady Baby pages 8-9 on physical activity during pregnancy (what), in the evening (when), on the train home from work (where)"*
- **Encourage the woman to record her behaviour**  
*"We have agreed: you are going to keep a note of your daily step count on your phone (what) each evening (when) before you go to bed (where)."*
- **Set goals together about what it is she is aiming to achieve**  
*"We have agreed: that the goal for your next appointment is to increase your average step count by 2,000 steps (what) during your lunch hour (when) by walking around the park near your office (where)."*

Today we have talked about ...

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Today's Date: / / 20

Next Appointment Date: / / 20



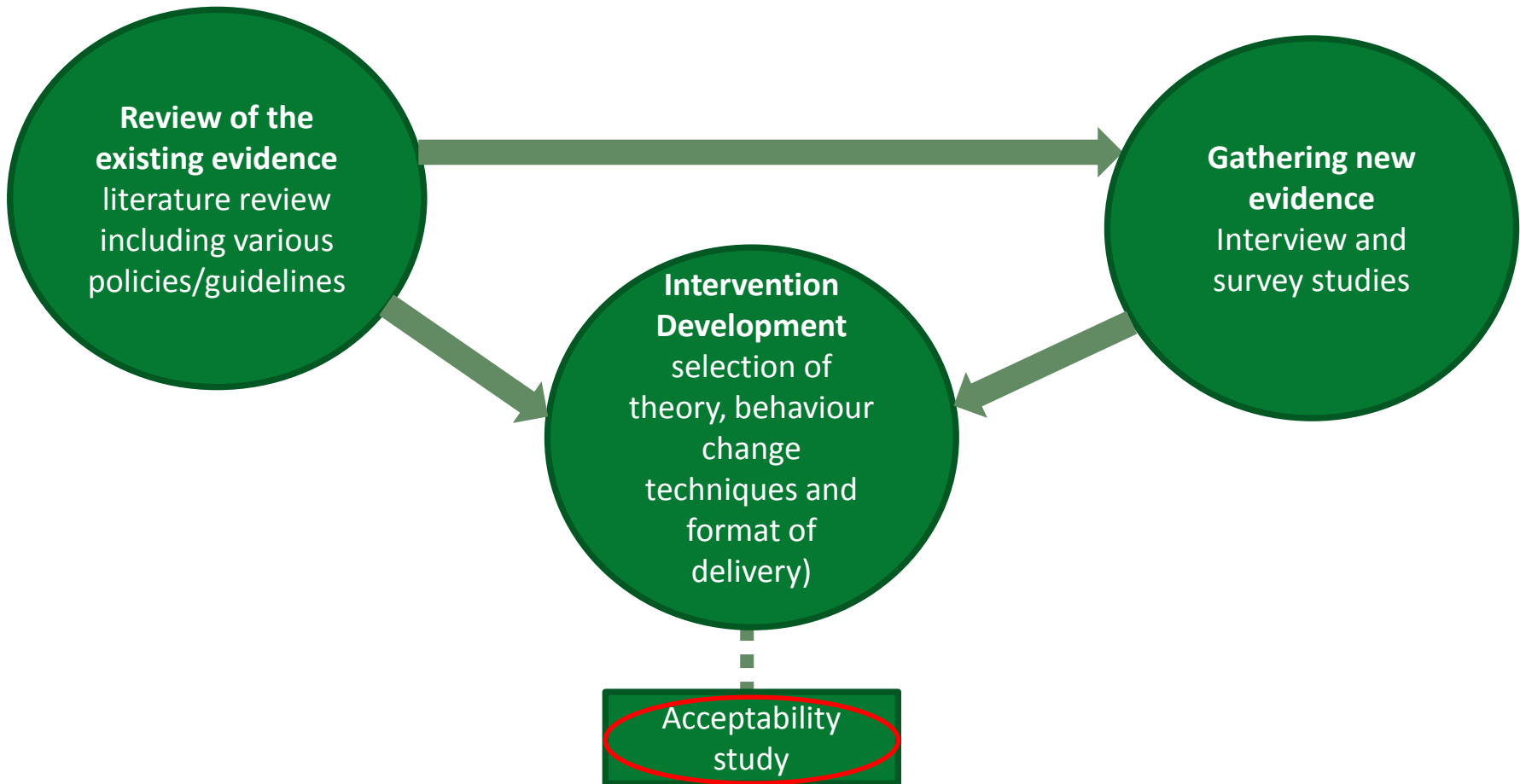
# Tool 3: Personalised plan potential impacts

**Midwife:** helps guide the conversation

**Pregnant woman:** the personalised plan provides women with a personalised reminder of what has been discussed. It also provides the woman with something concrete to take away

**Other:** potentially facilitate continuity of care as the midwife could follow up on the plan at subsequent appointments

# PhD overview





# Midwives' prospective acceptability of a toolkit designed to support them in performing their health promotion practice

- 108 midwives completed an online survey based on the Theoretical Framework of Acceptability, or TFA (Sekhon, Cartwright & Francis, 2017)
- Seven TFA component constructs:  
affective attitude, burden, perceived effectiveness, ethicality, intervention coherence, opportunity costs and self-efficacy

# Midwives' prospective acceptability of a toolkit designed to support them in performing their health promotion practice

Component construct items Measured on a scale of : 5 (= strongly agree) to 1 (= strongly disagree)	All midwives		
	M	SD	% agree or strongly agree
Using the toolkit would support me in my health promotion practice (Perceived Effectiveness)	4.13	±1.07	79
Using the toolkit would fit well within my values as a midwife (Ethicality)	4.02	±1.18	77
Using the toolkit would be straightforward (Self-efficacy)	3.81	±1.07	64
Using the toolkit would be something I would like to do (Affective Attitude)	3.75	±1.15	67
Using the toolkit would not interfere with my other priorities when providing antenatal care (Opportunity Costs)	3.40	±1.11	48
Using the toolkit would be something I would do in my antenatal practice (Intervention Coherence)	3.63	±1.17	61
Using the toolkit would not require a lot of effort (Burden)	3.28	±1.22	42

# Acceptability of the toolkit: what midwives liked

- midwives considered the toolkit as potentially effective
- fitted well within midwives' values
- most midwives appeared to like the toolkit and considered it straightforward to use

*"A more streamlined, thorough and women led way to discuss health promotion"*

*"Really like the practical tips behind supporting behaviour change and getting away from the traditional advice giving"*

# Acceptability of the toolkit: what midwives didn't like

- Many midwives also perceived the toolkit as being additional work that would cost them time within antenatal appointments
- Some midwives also appeared to consider the toolkit as being primarily designed to support pregnant women
- Some midwives questioned why the toolkit wasn't electronic

*"The toolkit is a good idea but time is the main issue. Having time to fill out the slips in an appointment or making a plan would be challenging in view of the practical things that need completing in a 10-minute appointment."*

*"With the move to electronic records in most Scottish boards, perhaps something that shows on the woman's maternity record app would be more acceptable with the questions and tips incorporated into the electronic record".*

# Summary of findings

- Midwives now have a very high health promotion workload and require more support to fully overcome the barriers they perceive in addressing health behaviours with pregnant women
- The HePPBe toolkit should be considered a practical example of the development of a multiple integrated behaviour change intervention, using the systematic Flex Five approach which considers target population, target behaviour, theory, BCTs and FoD

# What's next?

## Further development and testing of the toolkit

- Address midwives' perception that using the toolkit would add to their workload
- Digitalisation
- Testing of effectiveness e.g. open-pilot RCT or definitive RCT
- Expand target population e.g. could health visitors

## Further research

- Barriers and facilitators that other HCPs perceive in addressing multiple health behaviours with pregnant women
- Explore how pregnant women and new mothers perceive multiple health behaviour change

# Acknowledgements

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