Communications research on vaccination during pregnancy

Qualitative Research Report

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[1. EXECUTIVE SUMMARY 5](#_Toc525569806)

[1.1 Project background 5](#_Toc525569807)

[1.2 Research approach 5](#_Toc525569808)

[1.3 Pregnancy overall 5](#_Toc525569809)

[1.4 Maternal health 6](#_Toc525569810)

[1.5 Health pathways for pregnancy care 7](#_Toc525569811)

[1.6 Immunisation during pregnancy overall 8](#_Toc525569812)

[1.7 Whooping cough immunisation 8](#_Toc525569813)

[1.8 Influenza immunisation 9](#_Toc525569814)

[1.9 CALD and Aboriginal findings 9](#_Toc525569815)

[1.10 The health professional perspective 10](#_Toc525569816)

[1.11 Potential approaches to messaging 10](#_Toc525569817)

[1.12 Recommendations 11](#_Toc525569818)

[2. BACKGROUND 13](#_Toc525569819)

[2.1 Project background 13](#_Toc525569820)

[2.2 Potential communications 13](#_Toc525569821)

[2.3 Need for research 13](#_Toc525569822)

[3. RESEARCH OBJECTIVES 14](#_Toc525569823)

[4. RESEARCH APPROACH 15](#_Toc525569824)

[4.1 Overview 15](#_Toc525569825)

[4.2 Qualitative research sample 15](#_Toc525569826)

[4.3 Rationale for sample 17](#_Toc525569827)

[4.4 Recruitment of participants 18](#_Toc525569828)

[4.5 Research venues 18](#_Toc525569829)

[4.6 Approach to the discussions 18](#_Toc525569830)

[DETAILED FINDINGS 19](#_Toc525569831)

[5. THE CONTEXT: PREGNANCY OVERALL 20](#_Toc525569832)

[5.1 A highly emotional, primal period 20](#_Toc525569833)

[5.2 First time versus subsequent pregnancies 20](#_Toc525569834)

[5.3 Socio-economic differences 20](#_Toc525569835)

[5.4 The role of partners 21](#_Toc525569836)

[5.5 A time with a lot to think about 21](#_Toc525569837)

[6. MATERNAL HEALTH 22](#_Toc525569838)

[6.1 Health by far the biggest issue in pregnancy 22](#_Toc525569839)

[6.2 Health in pregnancy incorporates three broad aspects 22](#_Toc525569840)

[6.3 Steps to stay healthy during pregnancy 22](#_Toc525569841)

[6.4 Specific pregnancy health concerns 23](#_Toc525569842)

[6.5 Monitoring pregnancy development milestones 24](#_Toc525569843)

[7. HEALTH PATHWAYS FOR PREGNANCY CARE 25](#_Toc525569844)

[7.1 Five primary pathways for pregnancy care 25](#_Toc525569845)

[7.2 Medical versus non-medical approach 25](#_Toc525569846)

[7.3 Continuity of care 25](#_Toc525569847)

[7.4 Level of attentiveness is a caveat to continuity of care 26](#_Toc525569848)

[7.5 Public hospital birthing centres 26](#_Toc525569849)

[7.6 Public hospital with obstetrician 26](#_Toc525569850)

[7.7 Shared care 26](#_Toc525569851)

[7.8 Private midwife 27](#_Toc525569852)

[7.9 Private obstetrician 27](#_Toc525569853)

[8. IMMUNISATION DURING PREGNANCY OVERALL 28](#_Toc525569854)

[8.1 Immunisation is a very small part of pregnancy 28](#_Toc525569855)

[8.2 Health professionals drive awareness 28](#_Toc525569856)

[8.3 Perceived importance of immunisation 28](#_Toc525569857)

[8.4 Mixed levels of understanding of how pregnancy immunisation works 28](#_Toc525569858)

[9. WHOOPING COUGH IMMUNISATION 29](#_Toc525569859)

[9.1 Whooping cough versus pertussis 29](#_Toc525569860)

[9.2 Whooping cough is well known to be serious for babies 29](#_Toc525569861)

[9.3 The vaccine is known to be recommended, and is widely accepted 29](#_Toc525569862)

[10. INFLUENZA IMMUNISATION 31](#_Toc525569863)

[10.1 Very differing perceptions of ‘flu’, often totally underestimated 31](#_Toc525569864)

[10.2 Perceptions of influenza are beginning to change 31](#_Toc525569865)

[10.3 Influenza is not thought of in relation to babies 32](#_Toc525569866)

[10.4 Influenza vaccine seems far less clear cut than whooping cough 32](#_Toc525569867)

[10.5 Far lower levels of openness to the influenza vaccine 32](#_Toc525569868)

[11. CALD AND ABORIGINAL FINDINGS 33](#_Toc525569869)

[11.1 CALD women 33](#_Toc525569870)

[11.2 Aboriginal women 33](#_Toc525569871)

[12. THE HEALTH PROFESSIONAL PERSPECTIVE 34](#_Toc525569872)

[12.1 Health professionals are aware of their impact on the decision to vaccinate 34](#_Toc525569873)

[12.2 Few see their role beyond recommending vaccines 34](#_Toc525569874)

[12.3 Many appreciate paperwork prompts 34](#_Toc525569875)

[12.4 While confident, many would appreciate more facts 35](#_Toc525569876)

[13. POTENTIAL APPROACHES TO MESSAGING 36](#_Toc525569877)

[13.1 Vaccine-specific messages are stronger than generic messages 36](#_Toc525569878)

[13.2 Three key message themes with greatest potential for parents 36](#_Toc525569879)

[13.3 Potential influenza messages 36](#_Toc525569880)

[13.4 Potential whooping cough messages 37](#_Toc525569881)

[13.5 Potential health professional messages 38](#_Toc525569882)

[13.6 A range of messages that work comparatively less well 38](#_Toc525569883)

[14. RECOMMENDATIONS 40](#_Toc525569884)

[14.1 Overall 40](#_Toc525569885)

[14.2 An opportunity to entirely re-position ‘the flu’ in people’s minds 40](#_Toc525569886)

[14.3 An opportunity to reinforce perceptions of whooping cough 40](#_Toc525569887)

[14.4 The importance of being mindful of specific audiences 40](#_Toc525569888)

[14.5 Consider some key executional issues 40](#_Toc525569889)

[14.6 An opportunity to target health professionals 41](#_Toc525569890)

[14.7 The importance of recognising different maternal health pathways 41](#_Toc525569891)

# EXECUTIVE SUMMARY

## Project background

Two vaccines routinely recommended during pregnancy are for protection against influenza and whooping cough (pertussis). The influenza vaccine is available to pregnant women for free under the National Immunisation Program (NIP) and since 1 July 2018, the pertussis vaccine has also been available to pregnant women for free as part of the NIP. The pertussis vaccine was previously available through state and territory programs and is now funded nationally.

Communication materials will be developed to promote the inclusion of the pertussis vaccine on the NIP and will complement the activity already undertaken by states and territories. Communication materials will also be developed to support the uptake of the influenza vaccine among pregnant women.

The objectives of the communication products and activities to be informed by this research will be:

* to increase awareness and understanding of the maternal pertussis vaccine now available for pregnant women as part of the NIP, and pregnancy vaccinations more broadly (including influenza);
* to increase uptake of maternal pertussis vaccination in pregnancy; and
* to encourage vaccination providers to provide evidence-based information about maternal vaccinations available to pregnant women.

The target audiences for the communication materials will be:

* Primary audiences:
  + pregnant women
  + partners of pregnant women
* Secondary audiences:
  + health professionals advising pregnant women on vaccinations, including midwives, GPs, obstetricians and practice nurses.

Research was required to be undertaken with pregnant women (and their partners) as well as relevant health professionals regarding messaging and channels of communication to encourage the uptake of vaccinations recommended for women whilst pregnant. The overall objective was to identify the communications needs of pregnant women and health professionals, specifically in relation to vaccines recommended for pregnant women (the influenza vaccine and maternal pertussis vaccine).

## Research approach

Snapcracker conducted a series of 46 mini-group discussions with key target audiences, supplemented by a series of 12 individual interviews with health professionals.

Detailed information on the research methodology is provided in Section 4.

## Pregnancy overall

For many women, pregnancy is a very emotional time. It is often characterised as a ‘rollercoaster’, especially among first time mothers to be. Many also see pregnancy as a time when primal instincts take over. There can be a strong sense that the body simply knows what to do and that the expectant mother needs to listen to her body and adapt accordingly.

First-time pregnancies can feel very different to subsequent ones. During a first-time pregnancy, everything can feel completely new, with a great deal for the expectant mother to process. Ultimately, first-time expectant mothers are more likely to be nervous about their pregnancy overall. In second and subsequent pregnancies, there is a greater sense that the pregnant woman broadly knows what to expect. Even though there is widespread awareness that not all pregnancies are the same, ultimately, these women tend to be more relaxed about the pregnancy overall.

It appears there are also some key differences between those in different socio-economic groups. Those in higher socio-economic groups (often living in inner metropolitan areas, but certainly not always) appear to be more likely to seek out information themselves. Some women talk about this in terms of feeling judged by other mothers and mothers to be. Among women in lower socio-economic groups (often living in more regional and rural areas), there appears to be a tendency to trust the advice of health professionals. Ultimately, it seems that these women are less likely to feel negatively judged within their communities for the laid back approach they take to their pregnancy.

Partners tend to see their role as providing support and protection and to follow the lead of their pregnant partner as it is their partner who is experiencing pregnancy, not them.

Pregnant women claim to have a great deal on their minds during their pregnancies. Foremost, it appears that their health and the health of the baby are the things they think about most. Beyond health there is a wide array of things being considered, from thinking about what may happen after the pregnancy such as childcare to weight gain and rules about food. When it comes to information that is not health related, different women appear to consult and trust a wide variety of different sources, including family, friends, books and online, and it appears that there is no general rule as to which is most trusted or preferred.

## Maternal health

The biggest issue on the minds of pregnant women during pregnancy is health. In the context of health overall, other issues playing on the minds of pregnant women tend to pale in comparison. Concerns about health are almost exclusively focused on the health of the baby, both during pregnancy and after birth.

Most pregnant women claim to think about three broad aspects to health in pregnancy. These are:

* firstly, the steps they take to stay healthy,
* secondly, dealing with specific health concerns and
* thirdly, monitoring development milestones through the pregnancy.

### Steps to stay healthy

‘Staying healthy’ can mean different things to different people. For some women, often those in lower socio-economic groups, it can mean avoiding unhealthy behaviours they may otherwise have engaged in, such as avoiding alcohol, and not putting on ‘too much’ weight during pregnancy. For other women (often those in higher socio-economic groups), ‘staying healthy’ can mean taking positive steps to be ‘super healthy’ during pregnancy, such as eating the ‘right foods’ and using some alternative therapies to help with stress (meditation, pregnancy massage).

Despite intentions, in reality however, many clearly find it hard to eat healthily during pregnancy. For some, morning sickness can take over to the point where eating at all can be a real challenge. Others acknowledge that pregnancy is felt to be a time where they can legitimately get away with eating whatever they like, so they are happy to give in to cravings.

The majority seem to be aware of ‘the rules’ about what they should avoid during pregnancy, including soft cheese, processed meat, undercooked eggs and meat, unwashed lettuce and raw fish.

Most believe that exercise should be moderate during pregnancy. Most pregnant women appear to have some level of understanding that some gentle exercise during pregnancy is recommended (walking, swimming, yoga / Pilates).

### Dealing with specific health concerns

Stress during pregnancy is almost universally seen as something to avoid. Widespread concerns exist about the impact that stress can have on the unborn baby, from a vague sense of ‘stress is bad’ to a detailed understanding of it, such as ‘I’m worried about my cortisol levels’.

Morning sickness is clearly a key concern for pregnant women. It is widely accepted that morning sickness does not discriminate and that even women who were fine during their first pregnancy can be seriously affected in their second.

Most have at least heard of gestational diabetes. The majority claim to have at least some awareness that this condition exists, especially those who have reached the point in their first pregnancy where they have the blood glucose test.

Most know of pre-eclampsia by name, or as a concept. The majority can talk in broad terms about pre-eclampsia during pregnancy as being a risk that can be quite scary.

Not all pregnant women know their immune system has changed. Some are aware that they are more susceptible to illness. However, many are not aware and it appears that there is a sizeable proportion of women who have not considered it.

### Monitoring development milestones

The development of the foetus is felt to be very closely monitored and there is a perception of a plethora of tests and scans throughout the pregnancy to monitor the development of the baby (as well as their own health), which are seen as important milestones. Many expectant mothers report some level of anxiety around the foetus meeting these milestones.

## Health pathways for pregnancy care

There appear to be five primary pathways for pregnancy care. These are:

* public hospital birthing centres, offering midwife driven care with a focus on continuity of care (two main midwives), generally only for lower-risk pregnancies;
* public hospital with obstetrician, offering a mix of different midwives and obstetricians at different points, depending on the ‘riskiness’ of the pregnancy;
* shared care which is led by an accredited GP up to 20 weeks, then handed over to the public hospital / birthing centre;
* private midwife, either for home birth or to act as an advocate and single point of contact throughout the pregnancy; and
* private obstetrician offering a single point of contact throughout the pregnancy, midwives are largely only present at birth.

Most claim to either prefer a ‘medical’ or ‘non-medical’ approach. A ‘medical approach is often led by obstetricians in a truly medical setting and tends to be seen as a more clinical approach that is less ‘emotional’ in nature. A ’non-medical’ approach is usually led by midwives, often in a far less clinical setting (such as a birthing centre or even at home). In this context, it can be felt as if pregnancy is not treated like a medical condition but is dealt with in a non-interventionist way.

Some of these pathways are felt to offer more continuity of care than others. Birthing centres, private obstetricians / midwives and shared care (until 20 weeks) are felt to allow women to develop a personal relationship with their health professional. Conversely, in the public hospital with obstetrician model, women are often seeing different individuals throughout the pregnancy so it can be harder to develop a personal relationship.

However a single point of contact can in some cases be detrimental. If there is only a single point of contact with a health professional throughout the pregnancy, in some cases - despite closer relationships - this can mean that information falls through the cracks. Conversely when there is a far greater number of different clinicians involved in each pregnancy, this greater interaction with more professionals can mean that information is less likely to fall through the cracks.

It must be noted, however, that above all of this is clearly the factor of the level of attentiveness that is provided by each health professional in each pathway. If an obstetrician - who is the only point of contact that an expectant mother has - takes great care in ensuring that every aspect of health is covered in consultation, it is unlikely that information will be missed. On the other hand, should an expectant mother encounter a range of health professionals in a public hospital who are broadly less attentive to detail, it seems more likely that information may be missed or that follow-up to ensure she is vaccinated does not occur.

## Immunisation during pregnancy overall

Immunisation is rarely top of mind in regard to maternal health. Among pregnant women, immunisation is certainly recognised as a factor, but is often not spontaneously identified as a key issue. For the majority the issue of immunisation tends to be something that is prompted by a health professional. This is often by a GP in the first visit, then by others as they reach 28 weeks and pertussis vaccination is due, or opportunistically during flu season.

Even if GPs do not play an ongoing role during pregnancy, most pregnancy vaccines are given in a GP setting (by practice nurses). Most health professionals believe that GPs / clinics are most likely to have vaccines in stock, so they make sense as the main provider of this service.

At a broad level, most see immunisation as being important. Even those women who identify as ‘on the fence’ can feel that immunisation is a good idea during pregnancy - while this group can be nervous about vaccinating their babies, they are often less concerned about themselves.

A relatively small proportion of women understand that antibodies cross the placenta to the baby. A majority appear to understand the basic principal that protection is passed to the baby from the mother.

## Whooping cough immunisation

Pertussis is almost universally known as whooping cough - it is clearly the most well-known colloquial term. Few are aware of the term ‘pertussis’ and when it is used many question whether it is a different disease to what they know.

The seriousness of whooping cough for babies is well understood. Almost universally, expectant mothers and their partners know that small babies can cough until they die and that whooping cough is highly contagious. Beyond this, the majority have very little understanding of whooping cough but few believe they actually need to know any more about it as they already take it extremely seriously.

It seems that whooping cough has been firmly positioned as a disease that can seriously afflict young, vulnerable babies. For parents, whooping cough is believed to be entirely about the baby. The potential impact of whooping cough on adults is largely unknown and seems to be almost entirely disregarded.

Whooping cough is also felt to have a fairly high profile. Many have clear recall of relatively recent media coverage and there is relatively high awareness of social campaigns around whooping cough, including Light for Riley in particular.

Most believe that the whooping cough vaccine is strongly recommended, and there is a clear sense from both consumers and health professionals that the whooping cough vaccine is widely recommended between 28 and 32 weeks of pregnancy. Pregnant women almost universally accept the idea of this vaccine and often believe that 90% or more of pregnant women have this vaccine as recommended. In fact, many claim they will try to convince extended family and friends to get the vaccine if they are likely to come into contact with the baby within its first six weeks.

## Influenza immunisation

It appears that the context around flu / influenza is extremely different to that of whooping cough. Perceptions of ‘flu’ are very different between the majority who have not experienced influenza who often utterly underestimate it, and those who have had it or seen someone who has, who take it far more seriously. If we consider a spectrum from ‘a cold’ to ‘influenza’, all recognise that a sniffle or cold is unlikely to do real damage to a person’s health. At the other end of the spectrum, among those who are more familiar with influenza, there is clear recognition that it is a very serious illness that can be debilitating and can result in hospitalisation or even death. In the middle of this spectrum, there is a large ‘grey area’ in terms of perceptions of the flu among the majority unfamiliar with it, where there is real confusion and intermingling of a bad cold and ‘the flu’, with perceived symptoms not being overly serious or threatening.

Despite this it appears that perceptions of influenza are on the move, due to the gravity of the 2017 season, media reports which cover the serious effects of influenza (including death) and reports of a shortage of supply for this year’s vaccine. It can feel like the tide of conversation about ‘the flu’ has begun to change. From a language perspective ‘influenza’ is widely felt to seem more frightening and to carry considerably more weight as a term than ‘flu’.

Most pregnant women do not appear think about influenza in relation to the risks to their baby as influenza is widely perceived to be something that affects all ages more generally. In fact, many do not think about the possibility of babies contracting influenza.

The influenza vaccine is by no means seen to be totally safe and effective. There can be a genuine residual concern that the vaccine can give you ‘the flu’ and there can also be a belief that the vaccine often does not really work that well.

Seasonality also tends to blur the lines around the influenza vaccine. Outside the influenza season, however, there can be a real lack of certainty – including among health professionals - as to how the timing of the vaccine should work for pregnant women (i.e. ‘should they get it in August’?).

Overall, fewer pregnant women claim to be open to the influenza vaccine and many tend to be far less certain about getting the influenza vaccine. The majority believe that around 50-60 per cent receive it.

## CALD and Aboriginal findings

CALD women often claim to be uneasy about vaccines during pregnancy. Traditionally many believe that ‘taking medication’ during pregnancy is not advised and as a result, the notion of being ‘injected with medication’ can feel very counter-intuitive. For the most part, however, beyond this, CALD women tend to mirror the general population.

Aboriginal women tend to trust Aboriginal Medical Service (AMS) workers almost completely. As a result, all women claim they will follow the recommendation of their Aboriginal health workers.

## The health professional perspective

Regardless of their specific profession, all health professionals see themselves as being important advocates for immunisation. Health professionals tend to know that their recommendations can have a significant impact on pregnant women’s decisions to vaccinate.

Most health professionals see their role as recommending vaccines, and not necessarily as following up about whether they have actually been administered, particularly given that vaccinations tend to be given by GPs or at clinics. Other health professionals often see their role as purely advising women to make these appointments. Most acknowledge that clear potential exists for women to ‘fall through the cracks’ in this way. In this context, few health professionals see it as their role to argue the point about vaccines if a woman is expressing hesitation, but claim to prefer to refer people to other sources of information.

Health professionals tend to appreciate prompts for vaccination in paperwork. In most instances, the ‘pregnancy checklist’ includes the whooping cough vaccine although influenza is often believed to be missing and many claim they would be more likely to remember it if it were there.

Health professionals seem confident in their ‘spiel’ for recommending vaccines, which for whooping cough is generally felt to be all that is required. For influenza, many claim to encounter relatively frequent resistance to the idea of the influenza vaccine. In this context, most health professionals claim to be open to receiving more facts and are open to receiving extra information they can keep in their back pocket for use as required.

## Potential approaches to messaging

Both parents and health professionals respond extremely similarly to messages about immunisation in pregnancy. It appears that for both audiences, vaccine-specific messages seem stronger than generic messages as talking generally about vaccines will not address the very different perspectives people have towards each disease and each vaccine.

For flu, the role of messaging will ideally be to re-position it as influenza, highlighting its seriousness both for mother and baby. For whooping cough the role of messaging will ideally be to simply reinforce existing perceptions and behaviour and offer a reminder to be vaccinated.

There appear to be three key message themes that have the most potential to achieve the above objectives of re-positioning flu as influenza and reinforcing perceptions of whooping cough.

For influenza, there are two key message themes that can change perspectives of it:

* ‘influenza can have very serious consequences for pregnant women’ and
* ‘influenza can be life-threatening for babies’.

It also appears that targeting the disease rather than the vaccine is likely to be easier and more productive.

For whooping cough one key message theme serves to reinforce its importance:

* ‘yes, whooping cough is serious, but you can protect your baby’.

In addition, health professionals tend to appreciate messages that confirm the importance of their role in recommending vaccines to pregnant women and encouraging them to ‘keep up the good work for vaccination during pregnancy’. Health professionals also claim to appreciate any clarity around timing of the influenza vaccine, given the current ‘blurriness’ around the optimal timing for it. As a result, messages such as ‘influenza vaccination is best given before the influenza season starts but can be given at any time of the year’ are welcomed.

Some message territories work less well. These include widely known information such as the timing of the whooping cough vaccine, and easily challenged statistics such as ‘Pregnant women who are vaccinated are 50% less likely to get infected and the severity of disease is reduced if they do get infected’. 50% is believed to be quite low and messages that are seen to be contentious can distract, such as ‘You can get your flu vaccination at any trimester of pregnancy’. This message is often rejected outright as a large proportion of women are highly nervous about the idea of receiving the vaccine during the first trimester.

## Recommendations

It appears that there is strong potential for an overall strategy to influence pregnant women about vaccination. The research is clear that the communication tasks for the two pregnancy vaccines are vastly different and will require overtly separate treatment.

It is clear from the research that the seriousness of influenza is often completely underestimated by the parents and that it is very much blurred with the common cold. Participants in the research perceive that the attitudes they hold are more widespread in the general population. So, there may be value in re-framing ‘the flu’ as ‘influenza’, highlighting the very serious consequences that influenza can have for pregnant women and the potential dangers of influenza for small babies who cannot be vaccinated as they are too young. In this vein, the key opportunity is to focus attention on influenza itself rather than the vaccine.

The research is clear that the majority of parents are extremely fearful of whooping cough and as a result, most seem relatively on board with the idea of the vaccination. There is an opportunity to consider reinforcing messages which highlight the role of immunisation in protecting young babies from this serious disease.

In delivering the strategy, there is an opportunity to consider the range of audiences, being mindful that:

* first-time pregnant women are generally far more nervous;
* some mothers, particularly those from higher SEGs are likely to want considerably more detail around immunisation in pregnancy than others;
* those from CALD backgrounds are often far more hesitant about the idea of vaccination during pregnancy than others; and
* Aboriginal women trust and respect the AMS as a method of delivery of information.

In further developing materials aimed at pregnant women consider using different visual treatments for messages about influenza and whooping cough. Aim to deliver key messages directly via headlines and avoid relying on the audience reading the fine print to get these messages.

Consider some communications that directly target health professionals with an encouragement message which highlights the value of consistent recommendations around vaccination in pregnancy. There is an opportunity to let health professionals know about the change in strategy when it comes to influenza. In addition, be aware that any increase in clarity around the recommended timing for administering the influenza vaccine during pregnancy is likely to be welcomed by health professionals.

Finally, bear in mind the structural differences that exist in maternal health. In communicating with health professionals be mindful of the different pathways that exist for maternal health care and aim to ensure that regardless of pathway, the subject of immunisation is brought up consistently (or at all).

# BACKGROUND

## Project background

Two vaccines routinely recommended during pregnancy are for protection against influenza and whooping cough (pertussis):

* the influenza vaccine is available to pregnant women for free under the NIP; and
* since 1 July 2018, the pertussis vaccine has been available to pregnant women for free as part of the NIP. The pertussis vaccine has been previously available through state and territory programs and is now funded nationally.

Communication materials will be developed to promote the inclusion of the pertussis vaccine on the NIP and will complement the activity already undertaken by states and territories. Communication materials will also be developed to support the uptake of the influenza vaccine among pregnant women.

Collaboration with states and territories through the Jurisdictional Immunisation Committee and other groups including the National Immunisation Committee and the Australian Technical Advisory Group on Immunisation will inform the content of the communication products and activities to ensure that they meet the needs of the target audiences and are aligned with clinical best practice.

## Potential communications

The objectives of the communication products and activities to be informed by this research are:

* to increase awareness and understanding of the maternal pertussis vaccine now available for pregnant women as part of the NIP, and pregnancy vaccinations more broadly (including influenza);
* to increase uptake of maternal pertussis vaccination in pregnancy; and
* to encourage vaccination providers to provide evidence-based information about maternal vaccinations available to pregnant women.

The target audiences for the campaign will be as follows:

* Primary audiences:
  + pregnant women
  + partners of pregnant women
* Secondary audiences:
  + health professionals advising pregnant women on vaccinations, including midwives, GPs, obstetricians and practice nurses.

## Need for research

Research was required to be undertaken with pregnant women (and their partners) as well as relevant health professionals regarding messaging and channels of communication to encourage the uptake of vaccinations recommended for women whilst pregnant.

# RESEARCH OBJECTIVES

The overall objective was to identify the communications needs of pregnant women and health professionals, specifically in relation to vaccines recommended for pregnant women (the influenza vaccine and pertussis vaccine).

Specific research objectives for pregnant women and their partners were to:

* determine the extent to which messages, materials and channels meet the communication objectives;
* examine the extent to which key messages are appropriate, informative, convincing and relevant;
* identify the extent to which terminology used is understood and believed to be factual, convincing and relevant;
* determine what, if any, changes are required to maximise the effectiveness of messages and materials; and
* identify any potential unanticipated, negative consequences that may arise from messages and materials.

Specific research objectives for health professionals were to:

* explore their awareness of and experience with recommending vaccinations to pregnant women;
* determine confidence levels in providing recommendations, and identifying any additional support or information that could help them in providing these recommendations; and
* evaluate messages and materials in line with the specific objectives for pregnant women and their partners.

# RESEARCH APPROACH

## Overview

Snapcracker conducted a series of mini-group discussions with key target audiences, supplemented by a series of individual interviews with some health professionals. The breakdown of the sample was as follows:

* 16 x mini-group discussions with women who are currently pregnant;
* 8 x mini-group discussions with partners of women who are currently pregnant;
* 4 x mini-group discussions with Aboriginal women who are currently pregnant;
* 4 x mini-group discussions with CALD women who are currently pregnant;
* 4 x mini-group discussions with GPs;
* 5 x mini-group discussions with practice nurses;
* 5 x mini-group discussions with midwives;
* 8 x individual interviews with Obstetricians; and
* 4 x individual interviews with Aboriginal health workers.

All mini-group discussions included 4-6 participants and ran for up to 1 ¾ hours. Individual interviews ran for up to one hour.

## Qualitative research sample

Our sample for mini-group discussions was as follows:

| Grp | Segment | Typology | SEG | Location | State |
| --- | --- | --- | --- | --- | --- |
| 1 | Pregnant Women | Acceptors | Mix | Adelaide | SA |
| 2 | Pregnant Women | Acceptors | Mix | Dubbo | NSW |
| 3 | Pregnant Women | Acceptors | Mix | Mildura | VIC |
| 4 | Pregnant Women | Acceptors | Mix | Sydney | NSW |
| 5 | Pregnant Women | Acceptors | Mix | Mt Gambier | SA |
| 6 | Pregnant Women | Acceptors | Mix | Melbourne | VIC |
| 7 | Pregnant Women | Acceptors | Mix | Brisbane | QLD |
| 8 | Pregnant Women | Acceptors | Mix | Sydney | NSW |
| 9 | Pregnant Women | Acceptors | Mix | Brisbane | QLD |
| 10 | Pregnant Women | Acceptors | Mix | Port Macquarie | NSW |
| 11 | Pregnant Women | Acceptors | Mix | Melbourne | VIC |
| 12 | Pregnant Women | Acceptors | Mix | Gawler | SA |
| 13 | Pregnant Women | Acceptors | Mix | Rockhampton | QLD |
| 14 | Pregnant Women | On the fence | Mix | Brisbane | QLD |
| 15 | Pregnant Women | On the fence | Mix | Melbourne | VIC |
| 16 | Pregnant Women | On the fence | Mix | Sydney | NSW |
| 17 | Partners of pregnant women | Mix | Mix | Sydney | NSW |
| 18 | Partners of pregnant women | Mix | Mix | Mildura | VIC |
| 19 | Partners of pregnant women | Mix | Mix | Sydney | NSW |
| 20 | Partners of pregnant women | Mix | Mix | Melbourne | VIC |
| 21 | Partners of pregnant women | Mix | Mix | Sydney | NSW |
| 22 | Partners of pregnant women | Mix | Mix | Adelaide | SA |
| 23 | Partners of pregnant women | Mix | Mix | Mt Gambier | SA |
| 24 | Partners of pregnant women | Mix | Mix | Brisbane | QLD |
| 25 | GPs | N/A | N/A | Sydney | NSW |
| 26 | GPs | N/A | N/A | Dubbo | NSW |
| 27 | GPs | N/A | N/A | Melbourne | VIC |
| 28 | GPs | N/A | N/A | Gawler | SA |
| 29 | Practice Nurses | N/A | N/A | Sydney | NSW |
| 30 | Practice Nurses | N/A | N/A | Port Macquarie | NSW |
| 31 | Practice Nurses | N/A | N/A | Mildura | VIC |
| 32 | Practice Nurses | N/A | N/A | Adelaide | SA |
| 33 | Practice Nurses | N/A | N/A | Brisbane | QLD |
| 34 | Midwives | N/A | N/A | Brisbane | QLD |
| 35 | Midwives | N/A | N/A | Mildura | VIC |
| 36 | Midwives | N/A | N/A | Melbourne | VIC |
| 37 | Midwives | N/A | N/A | Adelaide | SA |
| 38 | Midwives | N/A | N/A | Rockhampton | QLD |
| 39 | Indigenous - Pregnant Women | Mix | Mix | Sydney | NSW |
| 40 | Indigenous - Pregnant Women | Mix | Mix | Sydney | NSW |
| 41 | Indigenous - Pregnant Women | Mix | Mix | Moree | NSW |
| 42 | Indigenous - Pregnant Women | Mix | Mix | Moree | NSW |
| 43 | Arabic - Pregnant Women | Mix | Mix | Melbourne | VIC |
| 44 | Arabic - Pregnant Women | Mix | Mix | Melbourne | VIC |
| 45 | Chinese - Pregnant Women | Mix | Mix | Sydney | NSW |
| 46 | Vietnamese - Pregnant Women | Mix | Mix | Sydney | NSW |

Our sample for in-depth interviews was as follows:

| I’view | Segment | Typology | SEG | Location | State |
| --- | --- | --- | --- | --- | --- |
| 1 | Obstetricians | N/A | N/A | Sydney | NSW |
| 2 | Obstetricians | N/A | N/A | Sydney | NSW |
| 3 | Obstetricians | N/A | N/A | Melbourne | VIC |
| 4 | Obstetricians | N/A | N/A | Melbourne | VIC |
| 5 | Obstetricians | N/A | N/A | Brisbane | QLD |
| 6 | Obstetricians | N/A | N/A | Mildura | VIC |
| 7 | Obstetricians | N/A | N/A | Mt Gambier | SA |
| 8 | Obstetricians | N/A | N/A | Port Macquarie | NSW |
| 9 | Aboriginal Health Workers | N/A | N/A | Sydney | NSW |
| 10 | Aboriginal Health Workers | N/A | N/A | Sydney | NSW |
| 11 | Aboriginal Health Workers | N/A | N/A | Moree | NSW |
| 12 | Aboriginal Health Workers | N/A | N/A | Moree | NSW |

## Rationale for sample

A number of considerations informed the development of our sample. Most are evident as per the sample table provided, but three merit further explanation.

### Typologies

We recruited pregnant women against the typologies identified in previous research about immunisation. Broadly, we grouped the typologies into ‘Acceptors’ and those ‘On the fence’, as follows:

* ‘Acceptors’: Strong Advocates, Active Acceptors and Passive Acceptors (94% of parents of children aged 0-5 and 92% of pregnant women);
* ‘On the Fence’: Cautious Considerers, Worriers and Naturalists (6% of parents of children aged 0-5 and 7% of pregnant women).

We did not recruit ‘Rejectors’ including Convinced Worriers, Convinced Naturalists and Outright Rejectors, as they now represent 0% (0.40% to be exact) of parents and only 1.5% of pregnant women. We heavily skewed our sample toward ‘Acceptors’ in line with the population as well as our highly challenging previous experience in trying to recruit pregnant women who sit on the fence.

We used a series of statements to allow potential participants to self-classify into the different typologies. This reflects the approach taken in previous research, including the quantitative study that was used to size the typologies.

### Pregnant women

We ensured that our groups with pregnant women included women at different stages of their pregnancy. We also ensured a mix of parental experience in each of the pregnant women groups.

### Socio-economic status

Socio-economic status can influence how people respond to communications. For this reason, we ensured that our sample is broadly representative of the population. However, in this case given that our audiences are already highly specialised, we ensured a mix of SEG was represented in each session, rather than over-complicating the sample and potentially undermining successful recruitment.

## Recruitment of participants

Participants were recruited using experienced, accredited specialist recruitment agencies.

A recruitment screening questionnaire was developed by Snapcracker in consultation with the Department, which was used by the recruiters to determine the suitability of participants. This questionnaire included demographic questions, as well as a range of questions to ensure that we met the sampling criteria outlined above.

## Research venues

In metropolitan areas, groups were held in dedicated group facilities with client viewing facilities. Groups in regional areas were conducted in local conference room / hotel facilities.

## Approach to the discussions

The focus of the discussions was on exploring information needs and responses to messaging, communications materials and channels. We structured discussions to ensure that we captured the spontaneous information needs of the target audiences prior to gathering their responses to any stimuli. All potential messages and communications materials were shown in rotated order across all the groups, to ensure no bias occurred.

# DETAILED FINDINGS

# THE CONTEXT: PREGNANCY OVERALL

## A highly emotional, primal period

For many women, pregnancy is a very emotional time. It is often characterised as a ‘rollercoaster’, especially among first time mothers to be. Emotionally, many claim pregnancy involves a complex mixture of positive emotions such as anticipation and excitement interspersed with more negative emotions such as anxiety and trepidation. Most see pregnancy as a highly unique stage of life, when things are felt to be very different from ‘normal’ - but only for a limited period of time.

Many see pregnancy as a time when primal instincts take over. Pregnancy can often feel highly unpredictable, when one minute an expectant mother feels perfectly fine and the next she is overwhelmed with a wave of nausea, or exhaustion, or exhilaration. For many there is a strong sense of simply having to ‘roll with it’ as the pregnancy develops, as there is felt to be no other genuine option. Rather, there can be a strong sense that the body simply knows what to do and that the expectant mother just needs to listen to her body and adapt accordingly.

## First time versus subsequent pregnancies

First-time pregnancies can feel very different to subsequent ones. During a first-time pregnancy, everything can feel completely new, with a great deal for the expectant mother to process. Pregnant women claim that every step of pregnancy brings novel considerations and challenges, and that each new sensation can be a cause of anxiety, with mothers-to-be asking themselves and others if it is normal. Without a reference point, most rely on second-hand insight from trusted sources of information into what to expect. Ultimately, first-time expectant mothers are more likely to be nervous about their pregnancy overall.

In second and subsequent pregnancies, there is a greater sense that the pregnant woman broadly knows what to expect and is less likely to jump at every sensation they experience. That said, there is clear and widespread acknowledgement that there can be big differences between pregnancies, and that first-time pregnancies do not always offer an indication of what second and subsequent pregnancies will be like.

More experienced mothers generally have fewer questions and appear to be more willing to take changes in their pregnancy in their stride. Ultimately, these women tend to be more relaxed about the pregnancy overall.

## Socio-economic differences

It appears there are also some key differences between those in different socio-economic groups. Differences are often between those in more regional and rural, and metropolitan areas. Those in higher socio-economic groups (often living in inner metropolitan areas, but certainly not always) appear to be highly focused on the detail of their pregnancy, to be more likely to seek out information themselves to augment and even challenge advice from health professionals, and to be most likely to use pregnancy tracking apps compared to their more outer metropolitan, regional or rural counterparts. Within their communities there is often an expectation that they will be very highly engaged with their pregnancy. Some women talk about this in terms of feeling judged by other mothers and mothers to be.

Among women in lower socio-economic groups (often living in more regional and rural or outer metropolitan areas), there appears to be a tendency to be less focused on the specific details of how the pregnancy is progressing. These women are often far more likely to simply trust the advice of health professionals and others with experience, rather than searching for additional information themselves. Health professionals mirror this difference when talking about their patients. Ultimately, it seems that women in lower socio-economic groups are far less likely to feel negatively judged within their communities for the approach they take to their pregnancy.

## The role of partners

Partners tend to see their role as providing support and protection. When it comes to the pregnancy overall, many partners claim to prefer to follow the lead of their pregnant partner than to take the lead themselves, as it is their partner who is experiencing pregnancy, not them. Certainly, most appear to be very reluctant to offer unsolicited advice or direction about the pregnancy.

For the most part, information received by partners tends to come via the pregnant woman rather than being independently sought out. In some cases, a woman will ask her partner to read or watch something specific about pregnancy. In addition, most partners claim to try to attend the major milestone scans and more significant appointments during a pregnancy. Beyond this, most partners claim to see their role as being in the background, supporting and caring for their partner.

“There’s no way I’d tell her what to do or anything like that – she’s the one going through it”

“I’m just there for moral support and to act as a punching bag!”

## A time with a lot to think about

Pregnant women claim to have a great deal on their minds during their pregnancies. First and foremost, it appears that their health and the health of the baby is the thing they think about most. Beyond health (which is discussed in detail in Section 6 ‘Maternal Health’), there is a wide array of things being considered. These include thinking about what may happen after the pregnancy such as childcare, how finances will fare during maternity leave, logistics and how to manage other children, concerns about mental state and stress as well as being a ‘good parent’, and changes to life overall. They also include things that the pregnant woman is experiencing during pregnancy such as feeling tired, weight gain, getting sufficient sleep, rules about food and simply being ‘ready’ overall for a new child.

When it comes to information that is not strictly health related, different women appear to consult and trust a wide variety of different sources. These general sources include family, friends, books and online such as through Google, and it appears that there is no general rule as to which is most trusted or preferred. Many seek advice from those who are perceived to be experienced and ‘in the know’ (their mother, older sister, friends who have been pregnant), pregnancy books such as ‘What to expect when you’re expecting’, websites and apps (Sprout, Ovia, Baby Centre, Essential Baby, Choice) in addition to Facebook groups and forums. Overall, most claim to prefer Australian content as it is seen as more relevant to their personal situation.

# MATERNAL HEALTH

## Health by far the biggest issue in pregnancy

Fundamentally, the biggest issue on the minds of pregnant women during pregnancy is health. In the context of health overall, other issues playing on the minds of pregnant women tend to pale in comparison. Clearly for pregnant women their own health is important and none want to experience any unnecessary health issues. Ultimately, however, concerns about health are almost exclusively focused on the health of the baby, both during pregnancy and after birth.

The notion of health is felt to be extremely ‘busy’ during pregnancy, with a great deal of information received as well as sought.

In terms of information received, many claim to feel as if they are faced with a barrage, including updates on their own and the baby’s health, when to expect different tests and scans, desirable health behaviours for pregnancy, pathways of care available, breastfeeding and other post-natal care and birth plans.

In terms of questions women are seeking answers to, many (first-time expectant mothers in particular) talk in terms of them being burning questions. These questions include ‘is what I’m experiencing normal?’, ‘how do I deal with morning sickness?’, ‘what stage of growth is my baby at?’, ‘is my baby developing as it should be?’, ‘what do I need to worry about?’ and ‘what will the delivery be like?’.

## Health in pregnancy incorporates three broad aspects

Most pregnant women claim to think about three broad aspects to health in pregnancy. These are:

* firstly, the steps they take to stay healthy,
* secondly, dealing with specific pregnancy health concerns and
* thirdly, monitoring development milestones through the pregnancy.

Each of these aspects is discussed in detail below.

## Steps to stay healthy during pregnancy

‘Staying healthy’ can mean different things to different people. For some women, often those in lower socio-economic groups, it can mean avoiding unhealthy behaviours they may otherwise have engaged in, such as avoiding alcohol, reducing smoking where relevant, avoiding excessive stress and cutting back on junk food. These women also talk about staying healthy in the context of not putting on ‘too much’ weight during pregnancy – while few are clear as to exact guidelines for this, many talk about not gaining more than about twenty kilograms.

“I made a point of trying not to smoke as much but it was hard”

For other women (often those in higher socio-economic groups), ‘staying healthy’ can mean taking positive steps to be ‘super healthy’ during pregnancy. These can include eating the ‘right foods’ (discussed below), cooking from scratch, maintaining gentle exercise and using some alternative therapies to help with stress (meditation, pregnancy massage).

“I’m doing a lot of juicing and eating as many fresh fruits and vegetables as I can”

For those who consider it, eating healthily is clearly aspirational. Many expectant mothers claim they started their pregnancy with grand plans to eat as healthily as possible, so as to give their baby the best start in life. In reality however, many clearly find it hard to do so. For some, morning sickness can take over to the point where eating at all can be a real challenge and they simply cannot stomach anything beyond fatty carbs. In this context, many claim the strong cravings for salty, carbohydrate-heavy foods such as hot chips simply take over. Some pregnant women claim to listen to their body even if they might prefer to make different rational choices. Others readily acknowledge that pregnancy is felt to be a time where they can legitimately get away with eating whatever they like, so they are happy to give in to this type of craving.

“All I wanted in my first trimester was hot chips, so that’s what I ate”

The majority seem to be aware of ‘the rules’ about what they can eat. Most claim to know that there are certain foods they should avoid during pregnancy, including soft cheese, processed meat, undercooked eggs and meat, unwashed lettuce and raw fish. While the vast majority claim to follow these rules, there can be some sense of elasticity among some mothers, who claim to be happy to eat sushi for example, as they see little risk given they are confident about hygiene levels where they buy it from.

Formal guidelines about foods to eat are generally imagined to be fairly obvious (especially among those who are more focused on diet during their pregnancy) such as eating plenty of fresh fruit and vegetables and consuming less processed food. None are aware of any other formal guidelines about food during pregnancy, beyond the above ‘rules’.

Most believe that exercise should be moderate during pregnancy and appear to have some level of understanding that some gentle exercise during pregnancy is recommended (walking, swimming, yoga / Pilates). While some tend to ‘brush off’ this idea (usually those who did not do much exercise prior to being pregnant), others claim they have tried to exercise but have been thwarted by feeling tired, sick, uncomfortable or in pain (again, they claim to listen to their bodies). Some women do claim to get a moderate level of exercise on a fairly regular basis, and a minority continue exercising at relatively intense levels, although these tend to be the exception rather than the rule.

“I try and walk the dog at least once a day”

## Specific pregnancy health concerns

Stress during pregnancy is almost universally seen as something to avoid. Widespread concerns exist about the impact that stress can have on the unborn baby. This can range from a vague sense of ‘stress is bad’ to a detailed understanding of it, such as ‘I’m worried about my cortisol levels’. Most pregnant women claim to be making some kind of effort to reduce their stress during pregnancy, from simply removing themselves from stressful situations, to stopping work and taking up meditation. Partners often claim their role is not only to provide support but also to quarantine their partners from stress in the first place.

Morning sickness is clearly a key concern for pregnant women. Even those who do not suffer from morning sickness claim to be keenly aware that it may strike at any moment, particularly in the first trimester. It is widely accepted that morning sickness does not discriminate and that even women who were fine during their first pregnancy can be seriously affected in their second or subsequent pregnancy. The intensity of the experience of morning sickness is also known to vary significantly, from mild nausea that can be controlled to violent illness that is extremely debilitating to the point where the parents-to-be worry about the safety of the child. In some cases, certain (usually unhealthy) foods are believed to reduce feelings of nausea or be more likely to stay down.

Most have at least heard of gestational diabetes. The majority claim to have at least some awareness that this condition exists, especially those who have reached the point in their first pregnancy where they have had the blood glucose test. The temporary nature of gestational diabetes can mean that some people do not see it as being overly serious. Some are aware of the likelihood that they could have a larger baby at birth, although this is by no means universal and certainly few are able to spontaneously identify that it increases the risk of diabetes later in life.

Most know of pre-eclampsia by name, or as a concept. The majority can talk in broad terms about pre-eclampsia during pregnancy as being a risk that can be quite scary. Some have a relatively sophisticated understanding of the condition including its name, symptoms and factors that can increase someone’s risk, while others are simply aware of ‘that blood pressure thing’. Key concerns of pre-eclampsia include the potential for death, or premature delivery.

Not all pregnant women know their immune system has changed. Some are aware and clearly understand that their immune system is different during pregnancy and that they are more susceptible to illness as a result. This theoretical understanding is often reflected in their lived experience, as they feel sick more often than normally. However, many are not aware and it appears that there is a sizeable proportion of women who have not considered this, or been told about it. For these women, the concept often makes intuitive sense when it is explained.

## Monitoring pregnancy development milestones

The development of the foetus is felt to be very closely monitored during pregnancy. Pregnant women are very mindful that there is a plethora of tests and scans throughout the pregnancy to monitor the development of the baby (as well as their own health). Regular scans are seen as important milestones where the ongoing health and development of the baby can be checked by experts and a range of tests designed to detect abnormalities is appreciated for being able to pre-empt any major health concerns. Many, especially first-time mums, can claim to feel a little overwhelmed by the volume and frequency of interactions they have with the health system during their pregnancy, but are generally happy to attend where recommended.

“It does seem like a lot when they first tell you, but it’s all important”

# HEALTH PATHWAYS FOR PREGNANCY CARE

## Five primary pathways for pregnancy care

There appear to be five primary pathways for pregnancy care. These are:

* public hospital birthing centres: Midwife driven care with a focus on continuity of care (two main midwives), generally only for lower-risk pregnancies;
* public hospital with obstetrician: Mix of different midwives and obstetricians at different points, depending on the ‘riskiness’ of the pregnancy;
* shared care: Led by an accredited GP up to 20 weeks, then handed over to the public hospital / birthing centre;
* private midwife: Either for home birth or to act as an advocate and single point of contact throughout the pregnancy; and
* private obstetrician: Single point of contact throughout the pregnancy, midwives are largely only present at birth.

Not all women are aware of each of these pathways, and many simply talk about having a choice between public and private options.

“I didn’t know there was such a thing as a private midwife”

## Medical versus non-medical approach

Most prefer either a ‘medical’ or ‘non-medical’ approach. A ‘medical’ approach is often led by obstetricians in a truly medical setting and tends to be seen as a more clinical approach that is less emotional or ‘touchy feely’ in nature. Some expectant mothers tell us they genuinely appreciate the feeling of safety they get from being in the care of a specialist health professional who is perceived to be at the pinnacle of the profession.

A ’non-medical’ approach is usually led by midwives, often in a far less clinical setting (such as a birthing centre or even at home). In this context, it can be felt as if pregnancy is not treated like a medical condition – rather, it is a natural process as part of life. Some genuinely appreciate the non-interventionist approach that often characterises midwife-led care.

## Continuity of care

Some of these pathways are felt to offer more continuity of care than others. Birthing centres, private obstetricians, private midwives and shared care (until 20 weeks) are felt to allow women to develop a personal relationship with their health professional, due to a greater amount of time spent with certain individuals. In many cases in this context women claim to develop a strong bond and a sense of trust with their individual health professional, as they see them regularly. Conversely, in the public hospital with obstetrician model, women are often seeing different individuals throughout the pregnancy so it can feel harder to develop a personal relationship. For some, there can be a sense of being pushed from pillar to post in this context.

“I saw a different person every time, or that’s what it felt like, I never knew in advance”

This difference can work in other ways as well. For example, in pathways involving private obstetricians and midwives, these health professionals are often the single point of contact, so pregnant women rely on them to provide all of the necessary information throughout the pregnancy. In some cases - despite closer relationships - this can mean that information falls through the cracks, particularly given the volume of information that needs to be shared. Conversely in shared care and public hospitals, there are a far greater number of different clinicians involved in each pregnancy, so even if women feel a little pushed from pillar to post, and even if pregnancy health care is not always coordinated, this greater interaction with more professionals can mean that information is less likely to be missed.

## Level of attentiveness is a caveat to continuity of care

It must be noted, however, that above all of this is clearly the factor of the level of attentiveness and overall care that is provided by each health professional in each pathway. If an obstetrician - who is the only point of contact that an expectant mother has during her pregnancy - is highly focused on detail and takes great care in ensuring that every aspect of health is covered in consultation, it is highly unlikely that information will be missed and fall through the cracks. As indicated, some expectant mothers positively choose a private obstetrician so as to receive what they believe is the highest level of medical care possible.

On the other hand, where an expectant mother encounters a range of health professionals who are broadly less attentive to detail and who may experience a diffusion of responsibility, it seems more likely that information may be missed and fall through the cracks, or that a woman is not followed up to ensure she has been vaccinated.

## Public hospital birthing centres

Some mothers choose this pathway specifically so as to have relatively close relationships with a small number of midwives (usually two) throughout their pregnancy. In some cases, women who used this pathway in their first pregnancy choose it again for subsequent pregnancies, often asking for the same midwives to provide their care. Some women report that midwives have given them their mobile phone numbers and have told them to call them at any time with any issues. Many in this context claim to enjoy what they see as the strong personal support they receive.

“I feel like she’s a friend more than a midwife, I can ask her anything’

## Public hospital with obstetrician

This pathway is felt to be similar to the birthing centre approach but can also involve the care of obstetricians at different stages of the pregnancy, sometimes throughout, and sometimes only at delivery. Essentially, the greater the perceived riskiness of the pregnancy, the greater the presence of obstetricians.

“I have gestational diabetes, so although I only had midwives in my first two pregnancies, this time I’m also seeing the obstetrician fairly regularly as well”

## Shared care

This pathway is often selected if an expectant mother has a particularly strong relationship with her GP, who is an accredited family doctor. The GP is often the main healthcare provider up to a certain point in the pregnancy, and then hands over the main care to midwives in the hospital or birthing centre. Another perceived advantage of this pathway is that a mother can then continue to consult with the same GP post-birth, maintaining strong continuity of personal care.

“I just love my GP, so I wanted her to be as present as possible for as long as possible”

## Private midwife

Private midwives are often selected to provide complete care throughout a pregnancy and after birth, including all antenatal and postnatal visits. Private midwives can be selected when a home birth is desired or to accompany a mother during labour in a hospital or birth centre. There can be a perception that this pathway is chosen by women who are prepared to pay someone to receive a non-medical approach to their pregnancy, and beyond, and that private midwives are skilled in natural techniques and remedies for all aspects of pregnancy and birth.

“I’m really into natural therapies and so is she, so it’s a good fit”

## Private obstetrician

This pathway is often chosen by expectant mothers seeking what they see as the best medical care possible during their pregnancy, including a perceived near-certain guarantee that the obstetrician will be at the birth (which in reality is not always the case). The care of the obstetrician tends to be for at least six months prior to birth, during which the mother-to-be sees the health professional increasingly often as birth approaches. Relationships can feel less personal than with midwives, but mothers in this pathway often claim to prefer a more clinical approach.

“I just really want the best medical care I can get, before and during birth”

# IMMUNISATION DURING PREGNANCY OVERALL

## Immunisation is a very small part of pregnancy

Immunisation is rarely top of mind in regard to maternal health. As identified, there is believed to be a dizzying array of other health considerations during pregnancy. Among pregnant women, immunisation is certainly recognised as a factor, but is often not spontaneously identified as a key issue. For the majority, the issue of immunisation tends to be something that is prompted by a health professional. This is often by a GP in the first visit, then by others as they reach 28 weeks and pertussis vaccination is due, or opportunistically during flu season.

“There is just so much to think about, especially the first time”

## Health professionals drive awareness

Health professionals drive awareness of pregnancy vaccines. Early in first pregnancies, awareness among women that there are vaccines at all tends to be patchy – some have no idea, some have a vague awareness while others are clear. Once a health professional shares the information, most tend to be very confident in the knowledge that vaccines are recommended and that they are free. For second and subsequent pregnancies, most claim to have a broad recollection, although often claim to welcome a reminder from their HP at the relevant moments.

Most vaccines during pregnancy are given in a GP or clinic setting. Even if GPs do not play an ongoing role during pregnancy, most pregnancy vaccines are given in a GP setting (most commonly by practice nurses). After GPs, it seems that the bulk of vaccinations especially in Victoria and South Australia are given at clinics run by local councils. There is some very isolated evidence of obstetricians giving vaccines at their clinics although this is certainly not the norm. Most health professionals believe that GPs / clinics are most likely to have vaccines in stock, so they make sense as the main provider of this service.

## Perceived importance of immunisation

At a broad level, most see immunisation as being important. Immunisation is often connected in people’s minds to the idea of ‘better health’, especially among acceptors, who simply believe that it is essentially better to immunise than not. The research found that even those on the fence can believe that immunisation is generally a good idea, especially during pregnancy. Essentially, while this group can be nervous about vaccinating their babies, they are often less concerned about themselves.

“I’m happy to be vaccinated while I’m pregnant, I’m big and strong enough to handle it, unlike a new born baby – whatever I can do to protect the little one”

## Mixed levels of understanding of how pregnancy immunisation works

Some understand that antibodies cross the placenta to the baby. A relatively small proportion of pregnant women understand and can articulate the process of passing antibodies to the foetus (using this kind of terminology). A majority appear to understand the basic principal that protection is passed to the baby from the mother. There are others who have not previously considered this idea and as a result, some believe that because they had the pertussis vaccine in a previous pregnancy, they do not require it again. That said, this group tend to readily accept this idea when they are told about it.

“I hadn’t ever really thought about that before, but it makes complete sense”

# WHOOPING COUGH IMMUNISATION

## Whooping cough versus pertussis

Pertussis is almost universally known as whooping cough. Whooping cough is clearly the most well-known colloquial term, and it is often appreciated for being evocative as a term, as it allows people to visualise the disease, and the sound made by the very specific cough. Few are aware of the term ‘pertussis’ and when it is used many become confused and question whether it is a different disease to what they know.

## Whooping cough is well known to be serious for babies

The seriousness of whooping cough for babies is well understood. Almost universally, expectant mothers and their partners know that small babies can cough until they die and that whooping cough is highly contagious. This knowledge is often driven by having seen or heard about distressing online videos of babies struggling to breathe. Beyond this, the majority have very little understanding of whooping cough, its symptoms beyond the cough or how to diagnose it. However, few believe they actually need to know any more about it – for most, their baby contracting it is a terrifying prospect and that is enough for them to take it extremely seriously.

For parents, whooping cough is believed to be entirely about the baby. Almost exclusively, pregnant women and their partners claim to worry about the impacts of whooping cough on their new-born babies. The potential impact of whooping cough on adults is largely unknown and seems to be almost entirely disregarded. Ultimately it seems that whooping cough has been firmly positioned as a disease that can seriously afflict young, vulnerable babies.

Whooping cough is also felt to have a fairly high profile. Many have clear recall of relatively recent media coverage. Certainly when there is an outbreak, whooping cough is believed to always make the news. Among pregnant women there is relatively high awareness of social campaigns around whooping cough, including Light for Riley in particular.

In some cases, pregnant women report that they are sufficiently concerned about whooping cough to talk about it with other people. This is not something many claim to do in relation to other diseases that may affect their baby, which can further demonstrate how seriously it is taken.

“You just hear about it and it’s so awful, I can’t imagine what it must have been like for that poor woman in Perth”

## The vaccine is known to be recommended, and is widely accepted

Most believe that the whooping cough vaccine is strongly recommended, and there is a clear sense from both consumers and health professionals that the whooping cough vaccine is widely recommended. There appear to be no blurred lines or shades of grey in this context. Rather, it is perceived to be quite black and white that women should get the vaccine during pregnancy. The well-defined recommended period (broadly known as being between 28-32 weeks of pregnancy) is often felt to help cement the strength of this recommendation and as this time approaches, recommendations appear to be made by almost all health professionals with whom pregnant women come into contact.

Pregnant women almost universally accept the idea of this vaccine. In our sample there were very few pregnant women who were truly hesitant about the whooping cough vaccine. That said, health professionals do report a minority who simply reject it, often existing in small community pockets in particular areas where communities are believed to be more staunchly against the idea of vaccines per se, such as Mount Barker in South Australia.

Most parents believe that around 90% or more of pregnant women have this vaccine as recommended. The vast majority simply seem to accept that the vaccine is effective at preventing the disease.

Indeed, many parents now claim to try to ‘cast the net’ of protection as wide as possible. Many claim that they will try to convince extended family and friends to get the vaccine if they are likely to come into contact with the baby within its first six weeks. Some claim to be far stricter and require anyone at all who comes into contact with the child to be vaccinated. This decision tends to be broadcast on social media to deter unvaccinated visitors prior to the six-week period after birth. Pregnant mothers also often talk about having their partners vaccinated as a matter of course.

“Yeah, just before the baby comes, I’ll post on Facebook that if anyone hasn’t had the vaccine, I’ll see them when she’s six weeks old and not before”

# INFLUENZA IMMUNISATION

It appears that the context around flu / influenza is extremely different to that of whooping cough.

## Very differing perceptions of ‘flu’, often totally underestimated

Perceptions of ‘flu’ are very different for those who truly know it. Among the majority who have not experienced influenza, perceptions tend to be quite nebulous and are often muddled up with a bad cold. This group tend to have a real lack of clarity about the symptoms of the flu. This jumbling of perceptions often appears to be exacerbated by loose language and product marketing about ‘cold and flu’ (such as Lemsip). This group often go to work with a bad cold and believe they have ‘the flu’.

Among those who have had influenza or seen it in others (the minority of pregnant women and partners in our sample), it is generally remembered very clearly, and with strong antipathy. This group tend to draw a significant distinction between the flu and a cold and claim to recognise the severity of the illness as compared to the common cold. There is often a tendency to believe that if someone has really had influenza, they would definitely know about it (and that they certainly would not be able to go to work).

“The flu is totally different. If you are vertical, you do not have the flu”

The seriousness of influenza is therefore clearly often totally underestimated. If we think of a spectrum from ‘a cold’ to ‘influenza’, all recognise that a sniffle or cold is likely to be relatively benign and is unlikely to do real damage to a person’s health overall. At the other end of the spectrum, among those who are more familiar with influenza, there is clear recognition that it is a very serious illness that can be debilitating to the point of a person being bedridden, and that it can result in hospitalisation or even death. In the middle of this spectrum, however, there is a large ‘grey area’ in terms of perceptions of the flu among the majority who do not really know it or its genuine symptoms. In this area, there tends to be real confusion and intermingling of a bad cold and ‘the flu’, with perceived symptoms including sore throat, fever, runny nose, temperature, aches and pains, cough and fuzzy head. Generally, these perceptions do not seem to this audience as being overly serious or threatening.

## Perceptions of influenza are beginning to change

Despite the underestimation of influenza described above, it appears that perceptions of influenza are on the move. The 2017 season is widely recognised to have been particularly severe, resulting in a number of deaths, which many claim to have found surprising. Media reports such as the 60 Minutes program aired on 22nd April 2018 which covered the serious effects of influenza - including death - on a range of people (including a pregnant woman) seem to have begun to shift the conversation about influenza. Reports of shortage of supply on this year’s vaccine also seem to have helped to create a sense of seriousness and urgency about it and overall, it can feel like the tide of conversation about ‘the flu’ has begun to change.

“I saw that 60 minutes on the weekend. I had no idea it could be so life-threatening, it’s really made me think about getting the vaccine”

It appears that careful language can add significant momentum to this shift. ‘The flu’ is widely recognised as a term and is felt to be quite casual and often directly linked to the common cold. It is generally seen to be less than serious and is often relatively easy to dismiss. On the other hand, ‘Influenza’ is clearly recognised as a term - most know that ‘the flu’ is simply a shortened version. It is believed to be clinical and medical in a way that ‘the flu’ is simply not. Overall, ‘influenza’ is widely felt to seem more frightening and to carry considerably more weight as a term.

“Influenza just sounds like something you need to pay attention to, much more than flu”

## Influenza is not thought of in relation to babies

Most pregnant women do not appear to think about influenza and their baby. Unlike whooping cough, influenza is widely perceived to be something that affects all ages (not just babies). As a result, pregnant women claim to think about influenza more broadly, not necessarily specifically related to their baby. Many do not think about the possibility of babies contracting influenza. This is simply not believed to be that common and even health professionals can struggle to think of examples. As a result, many tend to default to thinking about influenza’s impact on them personally, with a far more latent understanding of potential impacts on the foetus.

“In all my years as a practice nurse I’m not sure I’ve ever come across a baby with flu”

## Influenza vaccine seems far less clear cut than whooping cough

The influenza vaccine is by no means seen to be totally safe and effective. From a safety perspective, there can be genuine residual concern that the vaccine can give you ‘the flu’. This is often based on personal experience that appears to be very hard to shake by presenting facts. From an efficacy perspective, there can also be a belief that the vaccine often does not really work that well in protecting people from contracting influenza. This can often be reinforced by health professionals and media coverage, who give less than flattering commentary about its success rate. Taken together, these two concerns converge to create a powerful barrier to getting the vaccine. People ask themselves the question ‘if it doesn’t work, and it will probably make you sick why would you do it?’

Seasonality also tends to blur the lines around the influenza vaccine. During influenza season the vaccine tends to be top of mind and most health professionals claim to recommend the vaccine opportunistically during this time. Outside the influenza season however there can be a real lack of certainty as to how the vaccine should work for pregnant women, such as ‘should they get it in August’? Unlike whooping cough which has a clearly defined ‘window’, there is a distinct lack of certainty among anyone, including most health professionals, as to when the vaccine should be given. Beyond seasonality, nobody is believed to have a clear answer as to the optimal time to vaccinate during pregnancy.

## Far lower levels of openness to the influenza vaccine

Overall, fewer pregnant women claim to be open to the influenza vaccine. Compared to whooping cough which is often seen as a fait-accompli, pregnant women tend to be far less certain about getting the influenza vaccine. Many begin their pregnancy intending not to get the influenza vaccine, due to concerns about the vaccine or a belief that they generally ‘don’t get sick’. Many often then shift to being more open to having it as a result of conversations with their health professional. Broadly, most assume that not everyone gets this vaccine during pregnancy and the majority believe that around 50-60 percent receive it. However, indications are that this is on the move, in line with shifting perceptions of influenza.

# CALD AND ABORIGINAL FINDINGS

## CALD women

CALD women often claim to be uneasy about vaccines during pregnancy. Traditionally many believe that ‘taking medication’ during pregnancy is not advised and as a result, the notion of being ‘injected with medication’ can feel very counter-intuitive. Among women from established Arabic communities, there can be a sense that they are pressured by health professionals to receive vaccinations. Arabic women who have recently arrived often express high levels of confusion as to why they are advised to receive vaccines at all. Chinese women often claim they simply follow the advice they are given by health professionals. Vietnamese women appear more likely to be influenced by elders from their community than other populations.

For the most part, however, beyond this, CALD women tend to mirror the general population when it comes to pregnancy and vaccination, and there are very few specific findings that relate to them.

## Aboriginal women

Aboriginal women tend to trust Aboriginal Medical Service (AMS) workers almost completely. Many often have a personal relationship with their local AMS staff which is built on trust, loyalty and respect, to the point that in many cases other information or advice can be dismissed if it is not filtered or managed through the AMS. As a result, all women claim that vaccinations during pregnancy are extremely important, and that they will simply follow the recommendation of their Aboriginal health workers. Very few claim to personally seek information about vaccinations during pregnancy for this reason.

# THE HEALTH PROFESSIONAL PERSPECTIVE

## Health professionals are aware of their impact on the decision to vaccinate

Health professionals often recognise their significant impact on pregnant women. Regardless of their specific profession, all health professionals clearly see themselves as being important advocates for immunisation. This tends to be heightened among those who are present throughout their patients’ pregnancies. Health professionals tend to know that their recommendations can have a significant impact on pregnant women’s decisions to vaccinate. Many also know that they occupy a trusted position, particularly if they see themselves as a lead health provider for the pregnancy. Most claim to draw on their own professional experience wherever possible when making the case as to why someone should vaccinate, as they believe this helps to bring it to life for patients.

“I tell them about the young mother I had as a patient whose baby contracted whooping cough and how traumatic it was for all involved”

## Few see their role beyond recommending vaccines

Most health professionals see their role as recommending vaccines, and not necessarily as following up about whether they have actually been administered. Given that vaccinations tend to be given by GPs or at clinics, other health professionals often see their role as purely advising women to make these appointments and their job as having been done once they have made the recommendation. Some indicate that having made this recommendation they generally do not follow-up as to whether it has occurred. As a result, most health professionals acknowledge that pregnant women can ‘fall through the cracks’ in several ways when it comes to their pregnancy vaccination. In the first instance, there appears to be a slight chance that women do not receive the recommendation in the first place. In other cases, women may receive the recommendation and not act on it – which can be further exacerbated in instances where the practitioner who recommends the vaccine does not follow-up to ensure that it has been given.

Few health professionals see it as their role to argue the point about vaccines. Most see their role as recommending vaccines based on the best evidence but they acknowledge there are some women who deflect this. In these cases, health professionals claim they will generally answer questions and gently push back with evidence. Few claim to feel comfortable with the idea of directly or actively fighting these viewpoints as they do not wish to jeopardise the therapeutic relationship. Instead in these cases, many claim to prefer to refer people to other sources of information.

“I’m not going to sit and argue the case if they are really hesitant, it’s not worth my relationship with them overall”

## Many appreciate paperwork prompts

Health professionals tend to appreciate prompts for vaccination in paperwork, reinforcing that there is a wealth of information they have to get through with pregnant women in consultations. While immunisation is clearly seen as important, many claim that it can fall through the cracks during very full consultations.

Most practitioners rely on what they call ‘the pregnancy checklist’. These maternal health records vary by state and local public health networks although in most instances, it appears to include the whooping cough vaccine, with the question ‘has it been recommended, yes or no’?. However influenza is often believed to be missing and many spontaneously tell us they would be more likely to remember it if it were there.

“Just that little reminder – always helpful”

## While confident, many would appreciate more facts

Health professionals seem confident in their ‘spiel’ for recommending vaccines. For whooping cough, most tell us that they inform women that it is recommended between 28-32 weeks of pregnancy and that there is a need to have the vaccine in each pregnancy to help protect each baby. This is generally felt to be all that is required for the majority of pregnant women. For influenza, they tell us that they inform women that they are more vulnerable to illness during pregnancy and that they really do not want to contract influenza during pregnancy due to potential complications. They also tell women that the vaccine will not do them any harm. However, many claim to encounter relatively frequent resistance to the idea of the influenza vaccine.

Most health professionals claim to be open to receiving more facts to drive conversations. While health professionals tend to believe that they have ‘got it covered’, most are open to receiving extra information as a helpful addition to their spiel. Information is particularly appreciated when it provides facts or statistics to support the arguments they already have. Ultimately, anything health professionals can keep in their back pocket for use as required is felt to be helpful.

“Any other ammunition, especially if it’s short and sharp, is always welcome”

# POTENTIAL APPROACHES TO MESSAGING

The research evaluated a wide range of messages targeted at parents and health professionals.

## Vaccine-specific messages are stronger than generic messages

Both parents and health professionals respond extremely similarly to messages about immunisation in pregnancy.

It appears that for both audiences, vaccine-specific messages seem stronger than generic messages. While talking generally about vaccines during pregnancy is unlikely to be counter-productive, it seems that it will not address the very different perspectives people have towards each disease and each vaccine.

Influenza is often casualised, with its potential impacts on pregnant women and babies widely underestimated. The vaccine is also seen as less effective and is therefore not as widely accepted. Therefore, the role of messaging will ideally be to re-position flu as influenza, highlighting its seriousness both for mother and baby.

Whooping cough is perceived as a serious illness for babies and almost a ‘no-brainer’ when it comes to vaccination during pregnancy. Therefore, the role of messaging will ideally be to simply reinforce existing perceptions and behaviour and offer a reminder to be vaccinated.

## Three key message themes with greatest potential for parents

There appear to be three key message themes that have the most potential to achieve the above objectives of re-positioning flu as influenza and reinforcing perceptions of whooping cough. Within each message theme there are a range of individual messages which can resonate on their own, although indications are that these work best when taken together.

## Potential influenza messages

For influenza, there are two key message themes that can change perspectives of it – ‘influenza can have very serious consequences for pregnant women’ and ‘influenza can be life-threatening for babies’.

Taken together, the individual messages that work best to act as an overall theme for ‘influenza can have serious consequences for pregnant women’ are as follows:

* ‘even if you never get sick, changes in your immune, heart and lung functions during pregnancy can make you more vulnerable to illness’;
* ‘pregnant women who get influenza are more than twice as likely to be admitted to hospital, are more likely to be admitted to intensive care, and may even die’; and
* ‘if you get influenza while you are pregnant, it can also impact your unborn child - influenza during pregnancy can cause premature birth, or a low birth weight for your baby’.

Messages about the risks to women can help reposition ‘the flu’. Essentially, the idea of being more vulnerable than normal can be new news to some pregnant women, who may have not considered this before, but often take it on board quickly once informed. This can also undermine a belief about never getting sick as a reason not to have the vaccine. Any mention of intensive care or death is felt to talk to extremely serious consequences for the woman herself. For most, intensive care is a far more frightening prospect than hospital per se, as many attend hospital for routine scans and monitoring during their pregnancy. Finally, illness during pregnancy is often latently and naturally expected to be problematic for the foetus but speaking to both birth weight and prematurity can create a visceral impact of fear among pregnant women.

Taken together, the individual messages that work best to act as an overall theme for ‘influenza can be life-threatening for babies’ are as follows:

* ‘babies under six months are too young to get the influenza vaccine themselves – the only way they can be protected is if you get the vaccine during pregnancy, and pass on protective antibodies’;
* ‘influenza in infants is serious. Babies under six months are the most likely age group to be hospitalised with influenza’;
* ‘in the worst cases it can lead to death from serious respiratory problems and pneumonia’; and
* ‘in fact, influenza causes even more hospitalisations and deaths in babies than whooping cough’.

Influenza messages about babies are essentially felt to shift the conversation. Directly focusing on the risk to babies often introduces the concept for the first time, generating real surprise and concern. Introducing the concept by talking about the vulnerability of the baby and the need for the mother to pass on protection can sharpen the focus on a need to be immunised. By providing measured facts about the potential impacts of influenza on babies, the message creates fear and a sense of urgency. Finally, directly comparing influenza’s impacts to those of whooping cough powerfully leverages existing levels of concern about whooping cough, to help turn influenza into a genuine priority.

Overall, it appears that targeting the disease ‘influenza’ rather than the vaccine is likely to be more productive. Previous research in this area conducted by Snapcracker has identified how people ‘weigh up’ vaccines versus the illness itself, and it seems that influencing this calculation will be key to shifting behaviour. In this instance it seems that perceptions of the disease can be shifted relatively easily, while shifting perceptions of the vaccine may be comparatively challenging.

## Potential whooping cough messages

For whooping cough one key message theme serves to reinforce its importance – ‘yes, whooping cough is serious, but you can protect your baby’.

Taken together, the individual messages that work best to act as an overall theme for ‘yes, whooping cough is serious, but you can protect your baby’ are as follows:

* ‘most parents of infants are terrified of whooping cough’;
* ‘babies under six weeks of age are too young to be vaccinated against whooping cough themselves – the most effective way they can be protected is if you get the vaccine during pregnancy and pass on the protective antibodies. These antibodies remain in the baby for the first few months of life’; and
* ‘whooping cough can cause serious and sometimes life-threatening complications, including pneumonia and brain damage in babies’.

There is a clear role to reinforce the risks of whooping cough. Firstly, acknowledging a widely held truth reinforces parents’ fears about whooping cough. Talking about the role of antibodies can provide some new news and delivers a hint of science, which is often reassuring without seeming to be overwhelming and without offering too much ‘science’. Referring to the first months of life helps to reinforce the power of the vaccine to protect when babies are most vulnerable. Finally, introducing pneumonia and brain damage can help to further bring to life the dangers of the disease, providing additional reinforcement about the vaccine.

## Potential health professional messages

In addition, health professionals tend to appreciate messages that confirm the importance of their role in recommending vaccines to pregnant women and encouraging them to ‘keep up the good work for recommending vaccination during pregnancy’.

Taken together, the individual messages that work best to act as an overall theme for ‘keep up the good work for recommending vaccination during pregnancy’ are as follows:

* ‘the most important predictor of vaccine uptake is a recommendation from a health professional – pregnant women are much more likely to be vaccinated if their health professional recommends it’;
* ‘given pregnant women often rely on care from a number of different health professionals, it is important that every opportunity is taken to consistently recommend vaccination to pregnant women in their care’; and
* ‘vaccination rates in pregnancy are high, but they could be higher, so let’s work together to keep up the good work’.

Health professionals often claim to appreciate a reminder about the importance of their role. Essentially, validating the role of health professionals helps to reinforce the importance of them making recommendations. Messages to health professionals about the importance of consistency helps to serve as a reminder to always make recommendations. Simply acknowledging the good work already done by health professionals can generate a sense of warmth and help to galvanise further action.

Health professionals also claim to appreciate any clarity around timing of the influenza vaccine. Given the current ‘blurriness’ around the optimal timing for the influenza vaccine, health professionals also claim to appreciate any messaging which provides guidance around when it should be administered. As a result, messages such as ‘influenza vaccination is best given before the influenza season starts but can be given at any time of the year’ are welcomed. It appears that any further clarity that can be provided would likely be welcomed in the same way.

## A range of messages that work comparatively less well

### Widely known information

Known information tends not to have any impact on decisions. Messages such as ‘The flu vaccine and whooping cough vaccine are both free for pregnant women’, ‘It’s best to get your whooping cough vaccination between 28-32 weeks of each pregnancy’ and ‘It’s safe to get the whooping cough vaccine and the flu vaccine at the same time during pregnancy, or at separate visits’ tend to be widely known, and as a result are far less persuasive than other messages. In addition, most claim to expect their health professional to deliver this kind of logistical information. Health professionals claim to be very familiar with this information.

### Easily-challenged statistics

Some statistics are easily challenged and as a result lack power. ‘About 1 in every 125 babies less than six months of age who contract pertussis will die from complications including pneumonia and brain damage’ is not felt to deliver a complete picture as it does not indicate how many babies get whooping cough in the first place. In addition, ‘Vaccination during pregnancy is the best protective measure against the effects of influenza. Pregnant women who are vaccinated are 50% less likely to get infected and the severity of disease is reduced if they do get infected’ can be dismissed, as 50% is believed to be quite low and can even serve to further undermine the perceived effectiveness of the influenza vaccine. Messages such as ‘Vaccination during pregnancy has been shown to give babies more than 90% protection against severe infection in the first three months of life, by transfer of protective antibodies in the placenta’ can result in people being very quick to query what protection it is talking about, and in the context of influenza, this number can feel quite high.

### Contentious messages

Some messages are seen to be so contentious that they distract. ‘You can get your flu vaccination at any trimester of pregnancy’ is often rejected outright as a large proportion of women are highly nervous about the idea of receiving the vaccine during the first trimester.

‘The flu vaccine does not contain a live virus, so you cannot get the flu from the vaccine’ and ‘All vaccines available in Australia are inactivated vaccines which are considered safe for both pregnant women and their babies’ often encounter push back. In comparison to messages which tackle perceptions of the disease and its implications, messages which target the vaccine itself can come across as defensive and tend to be a lot easier for people to argue with. Any reassurance about vaccines appears to be most credibly delivered by health professionals (who already know this information).

# RECOMMENDATIONS

## Overall

It appears that there is strong potential for an overall strategy to influence pregnant women about vaccination. The research is clear that the communication tasks for the two pregnancy vaccines are vastly different and will require overtly separate treatment. In this way, there is an opportunity to consider a strategy that focuses on individual vaccines during pregnancy, rather than generic ‘pregnancy vaccination’ messages per se.

## An opportunity to entirely re-position ‘the flu’ in people’s minds

It is clear from the research that the seriousness of influenza is often completely underestimated by the general population and that its identity is very much blurred with the common cold. So, there could be real value in re-framing ‘the flu’ as ‘influenza’. In doing so there is an opportunity to consider highlighting the very serious consequences that influenza can have for pregnant women, including premature delivery of the unborn baby. Additionally, there is potential to consider communications that highlight the potential dangers of influenza for small babies who cannot be vaccinated as they are too young.

In this vein, the key opportunity is to focus attention on influenza itself rather than the vaccine. Clearly many have misgivings about the vaccine, some of which are based in reality (such as its lower rate of efficacy compared with other vaccines). So, there is potential to focus attention on the seriousness of the disease itself rather than tacking any misgivings about the vaccine as this seems most likely to influence people’s calculations when they consider whether or not to have the vaccine. It is also worth considering that any reassurance about the safety and efficacy of vaccines appears to be most credibly delivered via health professionals.

## An opportunity to reinforce perceptions of whooping cough

The research is clear that the majority of parents are extremely fearful of the whooping cough (in particular its risk for young babies) and as a result, most seem relatively on board with the idea of the vaccination. There is an opportunity to consider reinforcing messages which highlight the role of immunisation in protecting young babies from this serious disease. Equally, when referring to ‘pertussis’ it is worth considering using the term ‘whooping cough’ as it reflects common parlance.

## The importance of being mindful of specific audiences

In delivering the strategy, there is an opportunity to consider the range of audiences. Firstly, it is worth being mindful that first-time pregnant women are generally far more nervous and anxious than those who already have children. Secondly, be aware that some mothers, particularly those from higher SEGs are likely to want considerably more detail around immunisation in pregnancy than can be provided in headline communications. Thirdly, keep in mind that those from CALD backgrounds are often far more hesitant about the idea of vaccination during pregnancy than others. Finally, for Aboriginal women, consider using the AMS as the primary method of delivery of information - given the level of trust, loyalty and respect that exists.

## Consider some key executional issues

It is also worth considering some key executional issues for communications. In further developing materials aimed at pregnant women consider using different visual treatments for messages about influenza and whooping cough. Aim to deliver key messages directly via headlines and avoid relying on the audience reading the fine print to get these messages. Additionally, in any public relations activities, consider exclusively focusing on Australian content as it is seen as most relevant.

## An opportunity to target health professionals

Consider some communications that directly target health professionals. The research has reinforced the pivotal role that health professionals play in driving immunisation among pregnant women and that they are aware of this role. There may therefore be value in targeting health professionals with an encouragement message which highlights the value of consistent recommendations around vaccination in pregnancy. Equally, there is an opportunity to let health professionals know about the step-change in strategy when it comes to influenza so as to increase the chances that messages from ‘the system’ match those delivered directly to consumers. In addition, be aware that any increase in clarity around the recommended timing for administering the influenza vaccine during pregnancy is likely to be welcomed by health professionals.

## The importance of recognising different maternal health pathways

Finally, bear in mind the structural differences that exist in maternal health. In communicating with health professionals be mindful of the different pathways that exist for maternal health care and aim to ensure that regardless of pathway, the subject of immunisation is brought up consistently (or at all). Additionally, in any way possible, work with local health authorities to ensure that the influenza vaccine is added to the paperwork, and becomes a routine part of the consultation process.