



# CLINICAL PRACTICE GUIDELINES

## Pregnancy Care

Short-form guideline  
(revised April 2019)



**Australian Government**  
**Department of Health**

### Copyright statement

This work is copyright. You may download, print and reproduce the whole or part of this work in unaltered form for your own personal use or, if you are part of an organisation, for internal use within your organisation, but only if you or your organisation do not use the reproduction for any commercial purpose and retain this copyright notice and all disclaimer notices as part of that reproduction. Apart from rights to use as permitted in the Copyright Act 1968 or allowed by this copyright notice, all other rights are reserved and you are not allowed to reproduce the whole or any part of this work in any way (electronic or otherwise) without first being given the specific written permission from the Commonwealth to do so. Requests and inquiries concerning reproduction and rights are to be sent to the Communication Branch, Department of Health, GPO Box 9848, Canberra ACT 2601, or via email to [copyright@health.gov.au](mailto:copyright@health.gov.au).

### Disclaimer

This is a general guide to appropriate practice, to be followed subject to the relevant clinician's judgement in each individual case. The Commonwealth has taken all reasonable steps to ensure that the Guidelines are based on, and accurately represent, the best available published evidence on key areas of antenatal care. However, the Commonwealth does not accept any legal liability for any loss, damage costs or expenses that may result from reliance on the information and recommendations contained in these Guidelines.

### Suggested citation

Department of Health (2018) *Clinical Practice Guidelines: Pregnancy Care*. Canberra: Australian Government Department of Health.

---

---

### Publication approval



**Australian Government**

**National Health and Medical Research Council**

The recommendations in these Guidelines were approved under Section 14A of the *National Health and Medical Research Council Act 1992* at different times. NHMRC approval is valid for a period of 5 years and the relevant approval period is noted in the summary of recommendations (pages 6 to 20).

In approving guideline recommendations, NHMRC considers that they meet the NHMRC standard for clinical practice guidelines and is satisfied that the guideline recommendations are systematically derived, based on the identification and synthesis of the best available scientific evidence, and developed for health professionals practising in an Australian health care setting.

This publication reflects the views of the authors and not necessarily the views of the Australian Government.

# **Clinical Practice Guidelines: Pregnancy care**

## **Short-form guideline**

**2018 Edition**

**Revised April 2019**

**Contents**

- 1 SUMMARY ..... 5
- 2 SUMMARY OF RECOMMENDATIONS AND PRACTICE POINTS ..... 6
  - 2.1 Optimising pregnancy care ..... 7
  - 2.2 Core practices in antenatal care ..... 7
  - 2.3 Lifestyle considerations ..... 8
  - 2.4 Clinical assessments ..... 11
  - 2.5 Social and emotional screening ..... 14
  - 2.6 Routine maternal health tests ..... 15
  - 2.7 Targeted maternal health tests ..... 18
  - 2.8 Testing for fetal chromosomal anomalies ..... 19
  - 2.9 Common conditions during pregnancy ..... 20
  - 2.10 Clinical assessments in late pregnancy ..... 20
- 3 MEMBERSHIP OF THE COMMITTEES ..... 22
  - 3.1 Module I – 2008-2011 ..... 22
  - 3.2 Module II – 2011-14 ..... 26
  - 3.3 2016-17 review ..... 28
  - 3.4 2018-19 review ..... 29
- 4 TERMS OF REFERENCE ..... 31
  - 4.1 Modules I and II ..... 31
  - 4.2 2016-17 and 2018-19 reviews ..... 32
- ACRONYMS AND ABBREVIATIONS ..... 33

# 1 Summary

Antenatal care is a usual part of pregnancy for most women who give birth in Australia. Women receive antenatal care in community and hospital-based settings and see a range of health professionals. Effective models of antenatal care have a focus on the individual woman's needs and preferences, collaboration and continuity of care. These national Clinical Practice Guidelines on Pregnancy Care provide evidence-based recommendations to support high quality, safe antenatal care in all settings. This document combines Module I, published in 2012 and Module II, published in 2014. Some chapters were reviewed and updated in 2016-17.

Within the diversity of women that make up the Australian population, some face greater disadvantage, experience difficulties in accessing health services and may experience poorer outcomes. The broader context of a woman's life should be considered in planning and providing pregnancy care. Taking a woman-centred approach also ensures that a woman's social, emotional, physical, psychological, spiritual and cultural needs and expectations are considered and respected. Throughout the pregnancy, women should be given information in an appropriate form to support them to make choices about their care.

This document highlights specific approaches to pregnancy care for a range of groups, with a focus on improving the experience of antenatal care for Aboriginal and Torres Strait Islander women, migrant and refugee women and women with severe mental illness.

The topics covered in these Guidelines cover core practices in antenatal care that are relevant to antenatal care for healthy pregnant women (ie those who do not have identified pre-existing conditions or are at higher risk of complications such as in multiple pregnancy). This includes:

- discussing health and wellbeing during pregnancy (eg nutrition, physical activity)
- providing information to support parents to prepare for the rest of pregnancy, childbirth and parenthood
- promoting and supporting breastfeeding
- assessing fetal wellbeing (eg offering an 18-20 week ultrasound scan, discussing fetal movements and assessing fetal growth)
- assessing the health of the woman, in particular factors indicating that additional care may be required (eg for women at increased risk of preterm birth or pre-eclampsia)
- assessing for any condition that may affect the health of the woman or the unborn baby (eg anaemia, diabetes, sexually transmitted infections, mental health disorders)
- providing advice on symptoms that are common during pregnancy (eg reflux and haemorrhoids)
- discussing and offering testing for chromosomal anomalies
- providing opportunities for women to raise any issues they wish to discuss
- providing ongoing support
- enabling consultation and referral when required.

A planned schedule of antenatal visits should be agreed early in pregnancy, based on the individual woman's needs. Assessment of a woman's risk and any requirement for additional care continues throughout pregnancy.

These Guidelines are not intended as a textbook of antenatal care. A process of prioritisation was used to decide which topics were relevant to the Australian context. While many of these topics involve clinical assessment and maternal health testing, the management of any conditions identified is not generally discussed. Health professionals are directed to appropriate resources or other relevant guidelines where available.

The Guidelines provide a reliable and standard reference for health professionals providing antenatal care. By providing a summary of the currently available evidence on many aspects of antenatal care, they aim to promote consistency of care and improve the experience and outcomes of pregnancy care for all families.

## 2 Summary of recommendations and practice points

The recommendations in these Guidelines were developed by the Expert Advisory Committees (EACs) (see Appendices A and B) based on systematic reviews of the available evidence. Sets of systematic reviews were conducted in 2010-2011, 2012-2013, 2016-2017 and 2018-2019. Where sufficient evidence was available, this was graded according to the National Health and Medical Research Council (NHMRC) *Levels of Evidence and Grades for Recommendations for Developers of Guidelines* (2009) (see below) for the 2010-2011 and 2012-2013 reviews and using GRADE methods for the 2016-2017 reviews. Recommendations were approved by the NHMRC in December 2011, June 2014, October 2017 and April 2019, respectively. Topics prioritised for future review are included in Appendix C and marked as under review in this summary of recommendations.

For all reviews, where evidence was limited or lacking, consensus-based recommendations (CBRs) were developed. Some recommendations and CBRs from other national guidelines have also been included, where these were based on systematic review of the evidence.

For areas beyond the scope of the systematic reviews, practice points (PPs) were developed by the EAC, the Working Group for Aboriginal and Torres Strait Islander Women's Antenatal Care and/or the Working Group for Migrant and Refugee Women's Antenatal Care (see Appendices A and B).

The evidence-based recommendations and practice points focus on core practices in antenatal care, lifestyle considerations, and clinical and physical aspects of care. This care is provided following principles that endorse the protection, promotion and support necessary for effective antenatal care as outlined in Chapter 1. These include taking a holistic approach that is woman-centred, culturally sensitive and enables women to participate in informed decision-making at all stages of their care.

### Definition of grades of recommendations (2010-11 and 2012-13 reviews)

Type	Definition
<b>Grade A:</b>	Body of evidence can be trusted to guide practice
<b>Grade B:</b>	Body of evidence can be trusted to guide practice in most situations
<b>Grade C:</b>	Body of evidence provides some support for recommendation(s) but care should be taken in its application
<b>Grade D:</b>	Body of evidence is weak and recommendation must be applied with caution
<b>CBR:</b>	Recommendation formulated in the absence of quality evidence (where a systematic review of the evidence was conducted as part of the search strategy)
<b>PP:</b>	Area is beyond the scope of the systematic literature review and advice was developed by the EAC

Source: Adapted from NHMRC (2009) *Levels of Evidence and Grades for Recommendations for Developers of Guidelines* and NHMRC (2011) *Procedures and Requirements for Meeting the 2011 NHMRC Standard for Clinical Practice Guidelines*.

### Definition of grades of recommendations (2016-17 and 2018-19 reviews)

Type	Definition
<b>Evidence-based recommendation (EBR)</b>	Body of evidence can be trusted to guide practice
<b>Qualified evidence-based recommendation (QEBr)</b>	Body of evidence can be trusted to guide practice in most situations
<b>CBR</b>	Recommendation formulated in the absence of quality evidence (where a systematic review of the evidence was conducted as part of the search strategy)
<b>PP</b>	Area is beyond the scope of the systematic literature review and advice was developed by the EAC

## Recommendations and practice points<sup>1</sup>

### 2.1 Optimising pregnancy care

Recommendation/practice point	Grade	Chapter	Approval	
<i>Pregnancy care for Aboriginal and Torres Strait Islander women</i>				
A	Adopt a respectful, positive and supportive approach in providing antenatal care to Aboriginal and Torres Strait Islander women, working in partnership with women, Aboriginal and Torres Strait Islander health professionals and communities. This should be informed by cultural safety training for health professionals.	PP	3	10/2017-10/2022
<i>Pregnancy care for migrant and refugee women</i>				
B	The care needs of migrant and refugee women can be complex. The first point of contact (eg first antenatal visit) is important and care should be undertaken with an accredited health interpreter. Wherever possible, antenatal care should involve a multicultural health worker.	PP	4	6/2014-6/2019
C	Health professionals should take the initiative in organising for an accredited health interpreter wherever necessary, and reassure the woman of the benefits if she is reluctant.	PP	4	6/2014-6/2019
<i>Pregnancy care for women with severe mental health illness<sup>2</sup></i>				
D	For women with borderline personality disorder who have often experienced complex trauma, trauma-informed care and specific support for health professionals in dealing with challenging behaviours is a priority.	PP	5	10/2017-10/2022
E	For women with schizophrenia, bipolar disorder or borderline personality disorder, a multidisciplinary team approach to care in the antenatal period is essential, with clear communication, advance care planning, a written plan, and continuity of care across different clinical settings.	PP	5	10/2017-10/2022
F	Where possible, health professionals providing care in the antenatal period should access training to improve their understanding of care for women with schizophrenia, bipolar disorder and borderline personality disorder.	PP	5	10/2017-10/2022

### 2.2 Core practices in antenatal care

Recommendation/practice point	Grade	Chapter	Approval	
<i>Antenatal visits</i>				
1	Determine the schedule of antenatal visits based on the individual woman's needs. For a woman's first pregnancy without complications, a schedule of ten visits should be adequate. For subsequent uncomplicated pregnancies, a schedule of seven visits should be adequate.	B	8	12/2011-12/2016
I	At the first contact with a woman during pregnancy, make arrangements for the first antenatal visit, which requires a long appointment and should occur within the first 10 weeks.	CBR	8	12/2011-12/2016

<sup>1</sup> Recommendations are numbered using Arabic numerals (eg 1, 2, 3), consensus-based recommendations using Roman numerals (eg I, II, III) and practice points using letters (eg A, B, C).

<sup>2</sup> Adapted from Austin M-P, Highet N, Expert Working Group (2017) *Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline*. Melbourne: Centre of Perinatal Excellence.

Recommendation/practice point	Grade	Chapter	Approval
II Early in pregnancy, provide women with information in an appropriate format about the likely number, timing and content of antenatal visits associated with different options of care and the opportunity to discuss this schedule.	CBR	8	12/2011-12/2016
<i>Preparing for pregnancy, childbirth and parenthood</i>			
2 Advise parents that antenatal education programs are effective in providing information about pregnancy, childbirth and parenting but do not influence mode of birth.	B	9	6/2014-6/2019
3 Include psychological preparation for parenthood as part of antenatal care as this has a positive effect on women's mental health postnatally.	B	9	6/2014-6/2019
G Assisting parents to find an antenatal education program that is suitable to their learning style, language and literacy level may improve uptake of information.	PP	9	6/2014-6/2019
<i>Preparing for breastfeeding</i>			
4 Routinely offer education about breastfeeding as part of antenatal care.	C	10	6/2014-6/2019

### 2.3 Lifestyle considerations

Recommendation/practice point	Grade	Chapter	Approval
<i>Nutrition (under review)</i>			
H Eating the recommended number of daily serves of the five food groups and drinking plenty of water is important during pregnancy and breastfeeding.	PP	11.2	6/2014-6/2019
5 Reassure women that small to moderate amounts of caffeine are unlikely to harm the pregnancy.	C	11.2	6/2014-6/2019
I For women who are underweight, additional serves of the five food groups may contribute to healthy weight gain.	PP	11.2	6/2014-6/2019
J For women who are overweight or obese, limiting additional serves and avoiding energy-dense foods may limit excessive weight gain. Weight loss diets are not recommended during pregnancy	PP	11.2	6/2014-6/2019
<i>Nutritional supplements (under review)</i>			
6 Inform women that dietary supplementation with folic acid, from 12 weeks before conception and throughout the first 12 weeks of pregnancy, reduces the risk of having a baby with a neural tube defect and recommend a dose of 500 micrograms per day.	A	11.3	12/2011-12/2016
K Specific attention needs to be given to promoting folic acid supplementation to Aboriginal and Torres Strait Islander women of childbearing age and providing information to individual women at the first antenatal visit.	PP	11.3	12/2011-12/2016
7 Advise women that taking vitamin A, C or E supplements is not of benefit in pregnancy and may cause harm.	B	11.3	12/2011-12/2016
III Advise women who are pregnant to take an iodine supplement of 150 micrograms each day. Women with pre-existing thyroid conditions should seek advice from their medical practitioner before taking a supplement.	CBR	11.3	12/2011-12/2016
8 Do not routinely offer iron supplementation to women during pregnancy.	B	11.3	12/2011-12/2016

Recommendation/practice point	Grade	Chapter	Approval
9 Advise women with low dietary iron intake that intermittent supplementation is as effective as daily supplementation in preventing iron-deficiency anaemia, with fewer side effects.	B	11.3	6/2014-6/2019
L Women at high risk of iron deficiency due to limited access to dietary iron may benefit from practical advice on increasing intake of iron-rich foods.	PP	11.3	6/2014-6/2019
<i>Physical activity (under review)</i>			
10 Advise women that low- to moderate-intensity physical activity during pregnancy is associated with a range of health benefits and is not associated with adverse outcomes.	B	11.4	6/2014-6/2019
<i>Tobacco smoking</i>			
11 At the first antenatal visit: <ul style="list-style-type: none"> <li>• assess the woman's smoking status and exposure to passive smoking</li> <li>• give the woman and her partner information about the risks to the unborn baby associated with maternal and passive smoking</li> <li>• if the woman smokes, emphasise the benefits of quitting as early as possible in the pregnancy and discuss any concerns she or her family may have about stopping smoking.</li> </ul>	A	12	12/2011-12/2016
12 Offer women who smoke referral for smoking cessation interventions such as cognitive behavioural therapy.	B	12	12/2011-12/2016
M At each antenatal visit, offer women who smoke personalised advice on how to stop smoking and provide information about available services to support quitting, including details on when, where and how to access them.	PP	12	12/2011-12/2016
13 If, after other options have been explored, a woman expresses a clear wish to use nicotine replacement therapy, discuss the risks and benefits with her.	B	12	12/2011-12/2016
N If nicotine replacement therapy is used during pregnancy, intermittent-use formulations (gum, lozenge, inhaler and tablet) are preferred to continuous-use formulations (nicotine patches).	PP	12	12/2011-12/2016
O Smoking status should be monitored and smoking cessation advice, encouragement and support offered throughout pregnancy.	PP	12	12/2011-12/2016
P Health care professionals involved in the care of Aboriginal and Torres Strait Islander women should be aware of the high prevalence of smoking in some communities, and take account of this social norm when discussing smoking and supporting women to quit.	PP	12	12/2011-12/2016
Q Culturally appropriate smoking cessation services should be offered.	PP	12	12/2011-12/2016
R In discussing smoking and supporting Aboriginal and Torres Strait Islander women to quit smoking, health professionals should draw on the expertise of anti-tobacco workers where available.	PP	12	12/2011-12/2016

Recommendation/practice point	Grade	Chapter	Approval	
<i>Alcohol</i> <sup>3</sup>				
IV	Advise women who are pregnant or planning a pregnancy that not drinking is the safest option as maternal alcohol consumption may adversely affect the developing fetus.	CBR	13	12/2011-12/2016
<i>Medicines</i>				
V	Advise women that use of prescription and over-the-counter medicines should be limited to circumstances where the benefit outweighs the risk as few medicines have been established as safe to use in pregnancy.	CBR	14	12/2011-12/2016
VI	Therapeutic Goods Administration Category A medicines have been established to be safe in pregnancy.	CBR	14	12/2011-12/2016
S	Health professionals should seek advice from a tertiary referral centre for women who have been exposed to Category D or X medicines during pregnancy.	PP	14	12/2011-12/2016
T	Few herbal preparations have been established as being safe and effective during pregnancy. Herbal medicines should be avoided in the first trimester.	PP	14	12/2011-12/2016
<i>Substance use</i>				
VII	Early in pregnancy, assess a woman's use of illicit substances and misuse of pharmaceuticals and provide advice about the associated harms.	CBR	15	10/2017-10/2022
U	Asking about substance use at subsequent visits is important as some women are more likely to report sensitive information only after a trusting relationship has been established.	PP	15	10/2017-10/2022
<i>Oral health</i>				
14	At the first antenatal visit, advise women to have oral health checks and treatment, if required, as good oral health is important to a woman's health and treatment can be safely provided during pregnancy.	B	16	12/2011-12/2016
<i>Sexual activity</i>				
15	Advise pregnant women without complications that safe sexual activity in pregnancy is not known to be associated with any adverse outcomes.	B	17	6/2014-6/2019
<i>Travel</i>				
16	Inform pregnant women about the correct use of seat belts; that is, three-point seat belts 'above and below the bump, not over it'.	B	18	6/2014-6/2019
17	Inform pregnant women that long-distance air travel is associated with an increased risk of venous thrombosis and pulmonary embolism, although it is unclear whether there is additional risk during pregnancy.	C	18	6/2014-6/2019
V	Pregnant women should be advised to discuss considerations such as air travel, vaccinations and travel insurance with their midwife or doctor if they are planning to travel overseas.	PP	18	6/2014-6/2019
18	If pregnant women cannot defer travel to malaria-endemic areas, advise them to use insecticide-treated bed nets.	B	18	6/2014-6/2019

<sup>3</sup> Adapted from NHMRC (2009) *Australian Guidelines to Reduce Health Risks from Drinking Alcohol*. Canberra: National Health and Medical Research Council (currently under review).

Recommendation/practice point		Grade	Chapter	Approval
W	Beyond the first trimester, mefloquine is approved for use to prevent malaria. Neither malarone nor doxycycline are recommended for prophylaxis at any time during pregnancy. Chloroquine (or hydroxychloroquine) plus proguanil is safe but less effective so seldom used. For areas where only vivax is endemic, chloroquine or hydroxychloroquine alone is appropriate.	PP	18	6/2014-6/2019

## 2.4 Clinical assessments

Recommendation/practice point		Grade	Chapter	Approval
<i>Weight and body mass index (under review)</i>				
VIII	Measure women's weight and height at the first antenatal visit and calculate their body mass index (BMI) to inform gestational weight gain.	CBR	19	12/2011-12/2016
IX	Give women advice about appropriate weight gain during pregnancy in relation to their pre-pregnancy BMI (if recorded) or their BMI at the first antenatal visit.	CBR	19	12/2011-12/2016
X	Adopting a respectful, positive and supportive approach and providing information about healthy eating and physical activity in an appropriate format may assist discussion of weight management. This should be informed by appropriate education for health professionals.	PP	19	12/2011-12/2016
X	At every antenatal visit, offer women the opportunity to be weighed and encourage self-monitoring of weight gain.	CBR	19	10/2017-10/2022
XI	At every antenatal visit, discuss weight change, diet and level of physical activity with all women.	CBR	19	10/2017-10/2022

### *Gestational age*

19	Provide information and offer pregnant women who are unsure of their conception date an ultrasound scan between 8 weeks 0 days and 13 weeks 6 days to determine gestational age, detect multiple pregnancies and accurately time fetal anomaly screening.	B	20	12/2011-12/2016
20	Use crown-rump length (CRL) measurement to determine gestational age. If the CRL is above 84 mm, estimate the gestational age using head circumference.	B	20	12/2011-12/2016
Y	The timeframe for ultrasound assessment of gestational age overlaps with that for assessment of nuchal translucency thickness as part of testing for fetal chromosomal anomalies (11 weeks to 13 weeks 6 days), which may enable some women to have both tests in a single scan. This should only occur if women have been provided with an explanation of the purpose and implications of the tests and have given their informed consent to both tests.	PP	20	12/2011-12/2016
Z	The agreed due date should not be changed without advice from another health professional with considerable experience in antenatal care.	PP	20	12/2011-12/2016
AA	Ultrasound assessment of gestational age should only be performed by a person who has had specific training.	PP	20	12/2011-12/2016
BB	Repeated ultrasound assessments should only be used when clinically indicated.	PP	20	12/2011-12/2016

Recommendation/practice point	Grade	Chapter	Approval	
<i>Fetal development and anatomy</i>				
21	Offer pregnant women ultrasound screening to assess fetal development and anatomy between 18 and 20 weeks gestation.	B	21	6/2014-6/2019
CC	Timing of the ultrasound will be guided by the individual situation (eg for women who are obese, visualisation may improve with gestational age).	PP	21	6/2014-6/2019
DD	Repeated ultrasound assessment may be appropriate for specific indications but should not be used for routine monitoring.	PP	21	6/2014-6/2019
EE	Ultrasound assessment should only be performed by healthcare professionals with appropriate training and qualifications, within the appropriate scope (eg diagnostic or point of care).	PP	21	6/2014-6/2019
<i>Fetal growth restriction<sup>4</sup></i>				
FF	Early in pregnancy, assess women for risk factors for having a small-for-gestational-age fetus/newborn.	PP	22	10/2017-10/2022
XII	When women are identified as being at risk of having a small-for-gestational-age fetus/newborn, provide advice about modifiable risk factors.	CBR	22	10/2017-10/2022
XIII	Refer women with a major risk factor or multiple other factors associated with having a small-for-gestational-age fetus/newborn for ultrasound assessment of fetal size and wellbeing at 28-30 and 34-36 weeks gestation.	CBR	22	10/2017-10/2022
XIV	Do not assess fetal growth based solely on abdominal palpation.	CBR	22	10/2017-10/2022
XV	At each antenatal visit from 24 weeks, measure fundal height in centimetres.	CBR	22	10/2017-10/2022
GG	Refer women after 24 weeks gestation with a fundal height $\geq 3$ cm less than expected, a single fundal height which plots below the 10th centile or serial measurements that demonstrate slow or static growth by crossing centiles for ultrasound measurement of fetal size.	PP	22	10/2017-10/2022
HH	Refer women in whom measurement of fundal height is inaccurate (for example: BMI >35, large fibroids, polyhydramnios) for serial assessment of fetal size using ultrasound.	PP	22	10/2017-10/2022
<i>Fetal movements<sup>5</sup></i>				
XVI	Early in pregnancy provide women with verbal and written information about normal fetal movements. This information should include a description of the changing patterns of movement as the fetus develops, normal wake/sleep cycles and factors that may modify the mother's perception of fetal movements.	CBR	22	10/2017-10/2022
XVII	Advise women with a concern about decreased fetal movements to contact their health care professional immediately.	CBR	22	10/2017-10/2022

<sup>4</sup> Adapted from RCOG (2014) *The Investigation and Management of the Small-For Gestational Age Fetus: Green-Top Guideline 31*. London: Royal College of Obstetricians and Gynaecologists.

<sup>5</sup> Adapted from Gardener G, Daly L, Bowring V et al (2017) *Clinical practice guideline for the care of women with decreased fetal movements*. Brisbane: The Centre of Research Excellence in Stillbirth.

Recommendation/practice point		Grade	Chapter	Approval
II	Emphasise the importance of maternal awareness of fetal movements at every antenatal visit.	PP	22	10/2017-10/2022
XVIII	Do not advise the use of kick charts as part of routine antenatal care.	CBR	22	10/2017-10/2022
JJ	Maternal concern about decreased fetal movements overrides any definition of decreased fetal movements based on numbers of fetal movements.	PP	22	10/2017-10/2022

#### *Fetal heart rate*

XIX	If auscultation of the fetal heart rate is performed, a Doppler may be used from 12 weeks and either Doppler or a Pinard stethoscope from 28 weeks.	CBR	22	10/2017-10/2022
XX	Do not routinely use electronic fetal heart rate monitoring (cardiotocography) for fetal assessment in women with an uncomplicated pregnancy.	CBR	22	10/2017-10/2022

#### *Risk of preterm birth*

XXI	When women are identified as being at risk of giving birth preterm based on the presence of risk factors, provide advice about modifiable risk factors.	CBR	23	10/2017-10/2022
XXII	If a woman's cervical length is measured at the 18-20 week ultrasound and is <25 mm, assess other risk factors for preterm birth and seek expert advice if her risk of preterm birth appears to be high.	CBR	23	4/2019-4/2024

#### *Blood pressure*

22	Measure blood pressure at a woman's first antenatal visit to identify existing high blood pressure.	B	24	12/2011-12/2016
----	---	---	----	-----------------

#### *Proteinuria*

XIII	Routinely offer testing for proteinuria at the first antenatal visit, regardless of stage of pregnancy.	CBR	25	12/2011-12/2016
23	For point-of-care testing, use an automated analyser if available, as visual inspection of a urinary dipstick is the least accurate method to detect true proteinuria.	B	25	12/2011-12/2016

#### *Risk of pre-eclampsia (under review)*

24	Early in pregnancy, assess all women for clinical risk factors for pre-eclampsia.	EBR	26	10/2017-10/2022
25	Advise women at high risk of developing pre-eclampsia that calcium supplementation is beneficial if dietary intake is low.	A	26	6/2014-6/2019
KK	If a woman has a low dietary calcium intake, advise her to increase her intake of calcium-rich foods.	PP	26	6/2014-6/2019
26	Advise women at moderate-high risk of pre-eclampsia that low-dose aspirin from early pregnancy may be of benefit in its prevention.	B	26	6/2014-6/2019
27	Advise women that vitamins C and E are not of benefit in preventing pre-eclampsia.	B	26	6/2014-6/2019
XXIV	Routinely measure blood pressure to identify new onset hypertension.	CBR	26	6/2014-6/2019
XXV	Recommend testing for proteinuria at each antenatal visit if a woman has risk factors for or clinical indications of pre-eclampsia, in particular, raised blood pressure.	CBR	26	10/2017-10/2022

Recommendation/practice point	Grade	Chapter	Approval
LL Give women information about the urgency of seeking advice from a health professional if they experience: headache, visual disturbance (such as blurring or flashing before the eyes), epigastric pain (just below the ribs), vomiting and/or rapid swelling of the face, hands or feet.	PP	26	6/2014-6/2019

## 2.5 Social and emotional screening

Recommendation/practice point	Grade	Chapter	Approval
<i>Depression and anxiety<sup>6</sup></i>			
28 Use the Edinburgh Postnatal Depression Scale (EPDS) to screen women for a possible depressive disorder.	EBR	27	10/2017-10/2022
29 Arrange further assessment of woman with an EPDS score of 13 or more.	EBR	27	10/2017-10/2022
XXVI Conduct screening as early as practical in pregnancy and repeat at least once later in pregnancy.	CBR	27	10/2017-10/2022
XXVII For a woman with an EPDS score between 10 and 12, monitor and repeat the EPDS in 4-6 weeks as her score may increase subsequently.	CBR	27	10/2017-10/2022
XXVIII Repeat the EPDS at any time in pregnancy if clinically indicated.	CBR	27	10/2017-10/2022
XXIX For a woman with a positive score on Question 10 on the EPDS, undertake or arrange immediate further assessment and, if there is any disclosure of suicidal ideation, take urgent action in accordance with local protocol/policy.	CBR	27	10/2017-10/2022
XXX When screening Aboriginal and Torres Strait Islander women, consider language and cultural appropriateness of the tool.	CBR	27	10/2017-10/2022
XXXI Use appropriately translated versions of the EPDS with culturally relevant cut-off scores.	CBR	27	10/2017-10/2022
XXXII Be aware that anxiety disorder is very common in the perinatal period and should be considered in the broader clinical assessment.	CBR	27	10/2017-10/2022
XXXIII As part of the clinical assessment, use anxiety items from other screening tools (eg EPDS items 3, 4 and 5; Depression Anxiety Stress Scale anxiety items; and Kessler Psychological Distress Scale items 2, 3, 5 and 6) and relevant items in structured psychosocial assessment tools (eg the Antenatal Risk Questionnaire [ANRQ]).	CBR	27	10/2017-10/2022
<i>Psychosocial factors affecting mental health<sup>7</sup></i>			
MM Assess psychosocial risk factors as early as practical in pregnancy.	PP	28	10/2017-10/2022
30 If using a tool to assess psychosocial risk, administer the ANRQ.	EBR	28	10/2017-10/2022
XXXIV Undertake psychosocial assessment in conjunction with a tool that screens for current symptoms of depression/anxiety (eg the EPDS).	CBR	28	10/2017-10/2022

<sup>6</sup> Recommendations and practice points are based on Austin M-P, Highet N, Expert Working Group (2017) *Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline*. Melbourne: Centre of Perinatal Excellence.

<sup>7</sup> Recommendations and practice points are based on Austin M-P, Highet N, Expert Working Group (2017) *Mental Health Care in the Perinatal Period: Australian Clinical Practice Guideline*. Melbourne: Centre of Perinatal Excellence.

Recommendation/practice point		Grade	Chapter	Approval
NN	Ensure that health professionals receive training in the importance of psychosocial assessment and the use of a psychosocial assessment tool.	PP	28	10/2017-10/2022
OO	Ensure that there are clear guidelines around the use and interpretation of the psychosocial tool/interview in terms of threshold for referral for psychosocial care and/or ongoing monitoring.	PP	28	10/2017-10/2022
PP	Discuss with the woman the possible impact of psychosocial risk factors (she has endorsed) on her mental health and provide information about available assistance.	PP	28	10/2017-10/2022
XXXV	Consider language and cultural appropriateness of any tool used to assess psychosocial risk.	CBR	28	10/2017-10/2022

#### *Family violence*

31	Explain to all women that asking about family violence is a routine part of antenatal care and enquire about each woman's exposure to family violence.	EBR	29	10/2017-10/2022
XXXVI	Ask about family violence only when alone with the woman, using specific questions or the tool used in your state/territory.	CBR	29	10/2017-10/2022
XXXVII	Undertake and encourage regular and repeat training of health professionals, as training programs improve confidence and competence in identifying and caring for women experiencing family violence.	CBR	29	10/2017-10/2022
QQ	Be aware of family and community structures and support, and of community family violence and sexual assault services that can be called for urgent and ongoing support.	PP	29	10/2017-10/2022
RR	Responses to assisting Aboriginal and Torres Strait Islander women who are experiencing family violence need to be appropriate to the woman and her community.	PP	29	10/2017-10/2022

## 2.6 Routine maternal health tests

Recommendation/practice point		Grade	Chapter	Approval
<i>Anaemia (under review)</i>				
XXXVIII	Routinely offer testing for haemoglobin concentration to pregnant women early in pregnancy (at the first visit) and at 28 weeks gestation.	CBR	30	6/2014-6/2019
SS	In areas where prevalence of iron-deficiency anaemia is high, consider testing ferritin at the first antenatal visit.	PP	30	6/2014-6/2019
TT	Further investigation is required for women with a low haemoglobin concentration for their gestational stage. Repeat testing at 36 weeks may also be required for women who have symptoms or risk factors for anaemia or who live in or have come from an area of high prevalence.	PP	30	6/2014-6/2019
32	Advise iron supplementation for women identified as having iron-deficiency anaemia.	B	30	6/2014-6/2019
UU	Oral iron remains first-line treatment for iron-deficiency anaemia identified in the antenatal period. Intravenous iron should be offered to women who do not respond to oral iron or are unable to comply with therapy. In some remote settings, intramuscular iron may be administered by a health professional who does not have intravenous endorsement or where intravenous iron cannot be accessed.	PP	30	6/2014-6/2019

Recommendation/practice point		Grade	Chapter	Approval
33	Advise women with iron-deficiency anaemia that low-dose iron supplementation is as effective as high dose, with fewer side effects.	B	30	6/2014-6/2019
<i>Haemoglobin disorders</i>				
XXXIX	As early as possible in pregnancy, routinely provide information about haemoglobin disorders and offer testing (full blood count).	CBR	31	6/2014-6/2019
VV	Consider offering ferritin testing and haemoglobin electrophoresis as part of initial testing to women from high-risk population groups.	PP	31	6/2014-6/2019
<i>Hyperglycaemia (under review)</i>				
34	In the first trimester, assess a woman's risk of hyperglycaemia including: her age, body mass index, previous gestational diabetes or high birth weight baby, family history of diabetes, presence of polycystic ovarian syndrome and whether she is from an ethnic group with high prevalence of diabetes, such as Aboriginal and Torres Strait Islander peoples.	EBR	32	6/2014-6/2019
35	Advise women that physical activity and healthy eating during pregnancy help to reduce excessive weight gain but do not appear to directly reduce the risk of diabetes in pregnancy.	QEBR	32	6/2014-6/2019
XL	When a woman has risk factors for hyperglycaemia in the first trimester, suitable tests are glycated haemoglobin (HbA1c) or fasting blood glucose.	CBR	32	10/2017-10/2022
XLI	Between 24 and 28 weeks gestation, advise testing for hyperglycaemia to all women who have not previously been tested in the current pregnancy. Advise repeat testing to women who were tested early in pregnancy due to risk factors and who had a normal result on an initial test.	CBR	32	6/2014-6/2019
XLII	Use the World Health Organization/International Association of Diabetes and Pregnancy Study Groups tests and criteria to diagnose diabetes and gestational diabetes in pregnancy.	CBR	32	6/2014-6/2019
<i>Human immunodeficiency virus (HIV)</i>				
36	Routinely offer and recommend HIV testing at the first antenatal visit as effective interventions are available to reduce the risk of mother-to-child transmission.	B	33	12/2011-12/2016
WW	A system of clear referral paths ensures that pregnant women who are diagnosed with an HIV infection are managed and treated by the appropriate specialist teams.	PP	33	12/2011-12/2016
<i>Hepatitis B</i>				
37	Routinely offer and recommend hepatitis B virus testing at the first antenatal visit as effective postnatal intervention can reduce the risk of mother-to-child transmission.	A	34	12/2011-12/2016
<i>Hepatitis C</i>				
XLIII	At the first antenatal visit, recommend testing for hepatitis C.	CBR	35	10/2017-10/2022
XX	For women who have not previously been tested and who are having a planned invasive procedure (eg chorionic villus sampling), recommend testing for hepatitis C before the procedure.	PP	35	10/2017-10/2022

Recommendation/practice point	Grade	Chapter	Approval	
<i>Syphilis</i>				
38	Routinely recommend syphilis testing at the first antenatal contact.	EBR	36	4/2019-4/2024
XLIV	Recommend repeat testing early in the third trimester (28-32 weeks) and at the time of birth for women at high risk of infection or reinfection.	CBR	36	4/2019-4/2024
XLV	Seek advice from an expert in sexual health or infectious diseases regarding the care of women who test positive and their partners.	CBR	36	4/2019-4/2024
XLVI	Ensure contact tracing (including offering testing and treatment to identified contacts) is carried out. Involve an expert in contact tracing if required or seek advice from a sexual health clinic or other relevant expert.	CBR	36	4/2019-4/2024
39	For women with newly confirmed infectious syphilis, recommend an intramuscular dose of 1.8 g (given as two 900 mg injections) benzathine penicillin as soon as possible, ensuring that women receive treatment at least 30 days before the estimated date of birth to ensure adequate treatment before the birth.	EBR	36	4/2019-4/2024
XLVII	In areas affected by an ongoing syphilis outbreak, recommend testing at the first antenatal visit, at 28 and 36 weeks, at the time of birth and 6 weeks after the birth.	CBR	36	4/2019-4/2024
XLVIII	In areas affected by an outbreak, treat women as soon as possible, without waiting for confirmatory testing, particularly if there is a risk of loss to follow-up.	CBR	36	4/2019-4/2024
<i>Rubella</i>				
40	Routinely offer and recommend testing for rubella immunity at the first antenatal visit to identify women at risk of contracting rubella and enable postnatal vaccination to protect future pregnancies.	B	37	12/2011-12/2016
41	Inform women who have been vaccinated against rubella before they were aware of the pregnancy that the baby is highly unlikely to have been affected by the vaccine.	A	37	12/2011-12/2016
YY	Women identified as non-immune to rubella antenatally should be advised to avoid contact with people experiencing possible symptoms of rubella.	PP	37	12/2011-12/2016
<i>Asymptomatic bacteriuria</i>				
42	Routinely offer and recommend testing for asymptomatic bacteriuria early in pregnancy as treatment is effective and reduces the risk of pyelonephritis.	A	38	12/2011-12/2016
43	Use urine culture testing wherever possible as it is the most accurate means of detecting asymptomatic bacteriuria.	A	38	12/2011-12/2016
ZZ	Where access to pathology services is limited, dipstick tests may be used to exclude infection, with positive results confirmed by urine culture. Appropriate storage of dipsticks is essential to the accuracy of these tests.	PP	38	12/2011-12/2016
<i>Group B streptococcus (under review)</i>				
44	Offer either routine antenatal testing for Group B streptococcus colonisation or a risk factor-based approach to prevention, depending on organisational policy.	C	39	6/2014-6/2019
45	If offering antenatal testing for Group B streptococcus, arrange for testing to take place at 35-37 weeks gestation.	B	39	6/2014-6/2019

Recommendation/practice point	Grade	Chapter	Approval
46	C	39	6/2014-6/2019

## 2.7 Targeted maternal health tests

Recommendation/practice point	Grade	Chapter	Approval
<i>Chlamydia</i>			
XLIX	CBR	40	4/2019-4/2024
L	CBR	40	4/2019-4/2024
<i>Gonorrhoea</i>			
LI	CBR	41	6/2014-6/2019
<i>Trichomoniasis</i>			
47	B	42	6/2014-6/2019
<i>Toxoplasmosis</i>			
48	C	43	6/2014-6/2019
49	C	43	6/2014-6/2019
<ul style="list-style-type: none"> <li>washing hands before handling food</li> <li>thoroughly washing all fruit and vegetables, including ready-prepared salads, before eating</li> <li>thoroughly cooking raw meat and ready-prepared chilled meals</li> <li>wearing gloves and thoroughly washing hands after handling soil and gardening</li> <li>avoiding cat faeces in cat litter or in soil.</li> </ul>			
<i>Cytomegalovirus</i>			
LII	CBR	44	4/2019-4/2024
LIII	CBR	44	4/2019-4/2024
LIV	CBR	44	4/2019-4/2024
<i>Asymptomatic bacterial vaginosis</i>			
50	B	45	12/2011-12/2016

Recommendation/practice point		Grade	Chapter	Approval
AAA	Early treatment (before 20 weeks pregnancy) of proven bacterial vaginosis may be beneficial for women with a previous preterm birth.	PP	45	12/2011-12/2016
<i>Thyroid dysfunction</i>				
51	Do not routinely test pregnant women for thyroid dysfunction.	EBR	46	10/2017-10/2022
LV	Recommend thyroid testing to pregnant women who are at increased risk of thyroid dysfunction.	CBR	46	10/2017-10/2022
<i>Vitamin D status</i>				
52	Do not routinely recommend testing for vitamin D status to pregnant women in the absence of a specific indication.	EBR	47	10/2017-10/2022
LVI	If testing is performed, only recommend vitamin D supplementation for women with levels lower than 50 nmol/L.	CBR	47	10/2017-10/2022
<i>Human papilloma virus (under review)</i>				
LVII	Offer women cervical screening as specified by the National Cervical Screening Program.	CBR	48	6/2014-6/2019

## 2.8 Testing for fetal chromosomal anomalies

Recommendation/practice point		Grade	Chapter	Approval
<i>Tests for probability of chromosomal anomalies</i>				
LVIII	In the first trimester, give all women/couples information about the purpose and implications of testing for chromosomal anomalies to enable them to make informed choices.	CBR	50	12/2011-12/2016
LIX	If a woman chooses to have the combined test (nuchal translucency thickness, free beta-human chorionic gonadotrophin, pregnancy-associated plasma protein-A), make arrangements so that blood for biochemical analysis is collected between 9 weeks and 13 weeks 6 days gestation and ultrasound assessment takes place between 11 weeks and 13 weeks 6 days gestation.	CBR	50	12/2011-12/2016
BBB	Provide information about chromosomal anomalies and tests used to identify their probability in a way that is appropriate and accessible to the individual woman.	PP	50	12/2011-12/2016
<i>Diagnostic testing</i>				
53	If a woman chooses to have a diagnostic test for chromosomal anomaly, base the choice of test on gestational age (chorionic villus sampling before 14 weeks pregnancy and amniocentesis after 15 weeks) and the woman's/couple's preferences.	B	51	12/2011-12/2016
LX	Offer rapid access to appropriate counselling and ongoing support by trained health professionals to women who receive a diagnosis of fetal chromosomal anomaly.	CBR	51	12/2011-12/2016
CCC	Refer women with a high-probability test result but negative diagnostic test for further specialist assessment because of the increased likelihood of other fetal anomalies.	PP	51	12/2011-12/2016
<i>Other considerations in testing for fetal chromosomal anomalies</i>				
DDD	Support all women to access testing for chromosomal anomalies in a timely manner.	PP	52	12/2011-12/2016

## 2.9 Common conditions during pregnancy

Recommendation/practice point	Grade	Chapter	Approval
<i>Nausea and vomiting</i>			
EEE	PP	54	12/2011-12/2016
Women who experience nausea and vomiting in pregnancy can be advised that, while it may be distressing, it usually resolves spontaneously by 16 to 20 weeks pregnancy and is not generally associated with a poor pregnancy outcome.			
FFF	PP	54	12/2011-12/2016
Discontinuing iron-containing multivitamins for the period that women have symptoms of nausea and vomiting may improve symptoms.			
<i>Constipation</i>			
54	C	55	12/2011-12/2016
Offer women who are experiencing constipation information about increasing dietary fibre intake and taking bran or wheat fibre supplementation.			
55	C	55	12/2011-12/2016
Advise women who choose to take laxatives that preparations that stimulate the bowel are more effective than those that add bulk but may cause more adverse effects such as diarrhoea and abdominal pain.			
<i>Reflux (heartburn)</i>			
LXI	CBR	56	6/2014-6/2019
Offer women experiencing mild symptoms of heartburn advice on lifestyle modifications and avoiding foods that cause symptoms on repeated occasions.			
56	C	56	6/2014-6/2019
Give women who have persistent reflux information about treatments.			
<i>Haemorrhoids</i>			
LXII	CBR	57	6/2014-6/2019
Offer women who have haemorrhoids information about increasing dietary fibre and fluid intake. If clinical symptoms remain, advise women that they can consider using standard haemorrhoid creams.			
<i>Varicose veins</i>			
LXIII	CBR	58	6/2014-6/2019
Advise women that varicose veins are common during pregnancy, vary in severity, will not generally cause harm and usually improve after the birth. Correctly fitted compression stockings may be helpful.			
<i>Pelvic girdle pain</i>			
57	C	59	6/2014-6/2019
Advise women experiencing pelvic girdle pain that pregnancy-specific exercises, physiotherapy, acupuncture or using a support garment may provide some pain relief.			
<i>Carpal tunnel syndrome</i>			
LXIV	CBR	60	6/2014-6/2019
Advise women who are experiencing symptoms of carpal tunnel syndrome that the evidence to support either splinting or steroid injections is limited and symptoms may resolve after the birth.			

## 2.10 Clinical assessments in late pregnancy

Recommendation/practice point	Grade	Chapter	Approval
<i>Fetal presentation</i>			
58	C	61	6/2014-6/2019
Assess fetal presentation by abdominal palpation at 36 weeks or later, when presentation is likely to influence the plans for the birth.			

Recommendation/practice point		Grade	Chapter	Approval
GGG	Suspected non-cephalic presentation after 36 weeks should be confirmed by an ultrasound assessment.	PP	61	6/2014-6/2019
59	Offer external cephalic version to women with uncomplicated singleton breech pregnancy after 37 weeks of gestation.	B	61	6/2014-6/2019
LXV	Relative contraindications for external cephalic version include a previous caesarean section, uterine anomaly, vaginal bleeding, ruptured membranes or labour, oligohydramnios, placenta praevia and fetal anomalies or compromise.	CBR	61	6/2014-6/2019
HHH	External cephalic version should be performed by a health professional with appropriate expertise.	PP	61	6/2014-6/2019
<i>Prolonged pregnancy</i>				
61	Discuss options, including induction of labour, with a woman who is nearing prolonged pregnancy.	EBR	62	4/2019-4/2024

## 3 Membership of the committees

### 3.1 Module I – 2008-2011

Name	Discipline and affiliation/s
<i>Expert Advisory Committee (EAC) Executive</i>	
Professor Jeremy Oats Co-Chair	Chair Victorian Consultative Council on Obstetric and Paediatric Mortality and Morbidity Medical Co-Director, Integrated Maternity Services, Northern Territory Women's Hospitals Australasia
Professor Caroline Homer Co-Chair	Professor of Midwifery Centre for Midwifery, Child and Family Health, Faculty of Nursing, Midwifery and Health University of Technology Sydney
Dr Anne Sved Williams Co-Chair Screening and Monitoring Working Group	Director, Perinatal and Infant Mental Health, Children Youth and Women's Health Service, South Australia Australasian and New Zealand College of Psychiatrists
Professor Sue McDonald Co-Chair Clinical Working Group Chair Implementation Working Group	Professor of Midwifery and Women's Health La Trobe University, Victoria
Mr Bruce Teakle <sup>8</sup> Co-Chair Social and Lifestyle Group (until end December 2009)	Consumer representative National committee member of Maternity Coalition
Ann Catchlove <sup>8</sup> Co-Chair Social and Lifestyle Group Member of Implementation Working Group	Consumer representative President, Victorian Branch of The Maternity Coalition (from January 2010)
Professor Warwick Giles Co-Chair Clinical Working Group	Senior Staff Specialist, Maternal Fetal Medicine; Conjoint Professor Northern Clinical School University of Sydney Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Dr Henry Murray Co-Chair Screening and Monitoring Group	Fetomaternal Specialist, Acting Director of Obstetrics, John Hunter Hospital, Newcastle, NSW
Associate Professor Ruth Stewart Co-Chair Social and Lifestyle Group Member of Implementation Working Group	Director of Parallel Rural Community Curriculum, Faculty of Health, Medicine, Nursing and Behavioral Science School of Medicine, Deakin University Australasian College of Rural and Remote Medicine
Dr Jenny Hunt Co-Chair Working Group for Aboriginal and Torres Strait Islander Women's Antenatal Care	Public Health Medical Officer Aboriginal Health and Medical Research Council
Dr Marilyn Clarke Co-Chair Working Group for Aboriginal and Torres Strait Islander Women's Antenatal Care	Obstetrician and gynaecologist

<sup>8</sup> Consumer representatives were identified through advertisements placed in Consumer Health Forum Publications for consumers with an interest in national guidelines.

Name	Discipline and affiliation/s
<i>EAC Working Group for Aboriginal and Torres Strait Islander Women's Antenatal Care</i>	
Dr Jenny Hunt Co-Chair	Public Health Medical Officer Aboriginal Health and Medical Research Council
Dr Marilyn Clarke Co-Chair	Obstetrician and gynaecologist
Associate Professor Katie Panaretto	Population Health Medical Officer, Centre for Indigenous Health, University of Queensland, Queensland Aboriginal and Islander Health Council
Prof Sue Kildea	Chair of Midwifery, Australian Catholic University and Mater Mother's Hospital Australian College of Midwives
Ms Francine Eades	Senior Research Officer, Kulunga Research Network
Ms Mary Buckskin (until January 2011)	Chief Executive Officer, Aboriginal Health Council of South Australia
Ms Sue Hendy	Director of Women's, Children's & Youth Health, Western Sydney and Nepean Blue Mountains Local Health Networks
Ms Gwen Wallenburg	Community Midwife, Thursday Island
Ms Leshay Maidment	Branch Manager, Congress Alulkura, and Acting Deputy Chief Executive Officer, Central Australian Aboriginal Congress
Ms Stephanie Bell (until April 2011)	Chief Executive Officer, Central Australian Aboriginal Congress
Ms Simone Andy	Koori Maternity Strategy, Victorian Aboriginal Community Health Organisation
Ms Nicole Randriamahefa (until January 2011)	Tasmanian Aboriginal Centre National Aboriginal Community Controlled Health Organisation
<i>EAC Clinical Working Group</i>	
Prof Warwick Giles Co-Chair Working Group	Senior Staff Specialist, Maternal Fetal Medicine; Conjoint Professor Northern Clinical School University of Sydney Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Professor Sue McDonald Co-Chair Working Group	Professor of Midwifery and Women's Health La Trobe University, Victoria
Dr Andrew Bisits Member of Implementation Working Group	Lead Clinician, Birthing Services, Royal Hospital for Women, Sydney
Dr John Overton	Obstetrician, Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Associate Professor Jenny Gamble	Associate Professor of Midwifery, Deputy Head of School (Logan campus) Griffith University, Qld Australian College of Midwives
Ms Chris Cornwell	Service Manager, Women's and Children's Hospital Adelaide, SA
Dr Elizabeth Boyd	General Practitioner, Royal Australian College of General Practitioners
Ms Nellie Vagana <sup>9</sup>	Consumer representative
Ms Terri Barrett	Midwifery Director, Statewide Obstetric Support Unit, King Edward Memorial Hospital, Department of Health WA

<sup>9</sup> Consumer representatives were identified through advertisements placed in Consumer Health Forum Publications for consumers with an interest in national guidelines.

Name	Discipline and affiliation/s
<i>EAC Screening and Monitoring Group</i>	
Dr Anne Sved Williams Co-Chair Working Group	Director, Perinatal and Infant Mental Health, Children Youth and Women's Health Service, South Australia Australasian and New Zealand College of Psychiatrists
Dr Henry Murray Co-Chair Working Group	Fetomaternal Specialist, Nepean Clinical School University of Sydney Australian and New Zealand College of Obstetricians and Gynaecologists
Associate Professor Jenny Fenwick	Associate Professor of Midwifery, University of Technology, Sydney, NSW Australian College of Midwives
Professor Jane Fisher	Key Centre for Women's Health in Society, University of Melbourne
Associate Professor Elizabeth Sullivan	Director, AIHW National Perinatal Statistics Unit
Professor Michael Permezel	Head of Department, University of Melbourne, Mercy Hospital for Women Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Ms Tanya Farrell	Director, Maternity Services, Royal Women's and Children's Hospital, Melbourne, Victoria
Dr Sandra Eades	Senior Research Fellow, Baker IDI Heart and Diabetes Institute, Melbourne
Ms Kay Hyde	Director, Professional Governance Nurses and Midwives Board of WA
Prof Marie-Paule Austin	Consultant Psychiatrist, St John of God Chair of Perinatal and Women's Mental Health School of Psychiatry, University of NSW
Dr Helen Roxborough	General Practitioner
<i>EAC Social and Lifestyle Group</i>	
Ann Catchlove <sup>10</sup> Co-Chair Working Group	Consumer representative from January 2010
Mr Bruce Teakle <sup>10</sup> Co-Chair Working Group	Consumer representative from January 2009 to December 2009
Louise Hartley <sup>10</sup>	Consumer representative August 2008 to December 2008
Associate Professor Ruth Stewart Co-Chair Working Group	Director of Clinical Studies, Integrated Model of Medical Education in Rural Settings (formerly Parallel Rural Community Curriculum), Faculty of Health, Medicine, Nursing and Behavioral Science School of Medicine, Deakin University Australasian College of Rural and Remote Medicine
Professor Maralyn Foureur	Professor of Midwifery, University of Technology, Sydney Australian College of Midwives
Mr Scott Wilson	State Director, Aboriginal & Drug Council (SA) Inc National Indigenous Drug and Alcohol Committee
Ms Robyn Collins	Chief Executive Officer, Nurses and Midwives Board of WA

<sup>10</sup> Consumer representatives were identified through advertisements placed in Consumer Health Forum Publications for consumers with an interest in national guidelines.

Name	Discipline and affiliation/s
Dr Ted Weaver	Obstetrician and gynaecologist, Past President, Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Professor Anne Buist	National Program Director, <i>beyondblue</i>
Ms Susan Stratigos	Policy Advisor, Rural Doctors Association of Australia, National Rural Women's Coalition
Ms Debra Oag	Policy Officer, Smokefree Pregnancy Project (until July 2010)
Ms Noelle Mason	Group President, Country Women's Association
<i>Project Officers / Systematic Literature Reviewers</i>	
Dr Stuart Barrow	Project Officer until 2010
Ms Glenda McDonald	Project Officer until 2010
Ms Wendy Cutchie	Midwifery Project Officer from 2010
Ms Vanessa Watkins	Midwifery Project Officer from June 2010
Dr Andrea Gordon	Pharmacologist, Research Fellow, Sansom Institute for Medical Research University of South Australia (contracted to project from November 2010)
Dr Antonina Mikocka-Walus	Research Fellow, School of Nursing & Midwifery, University of South Australia (contracted to project from November 2010)
Dr Rasika Jayasekara	Registered Nurse, Lecturer, School of Nursing & Midwifery, University of South Australia (contracted to project from November 2010)
Dr Lois McKellar	Lecturer, Nursing & Midwifery, University of South Australia (contracted to project from November 2010)
Ms Penny Williamson	Research Assistant (contracted to project from November 2010)
Ms Dianne Gall	Research Assistant (contracted to project from November 2010)
<i>Methodological Consultants</i>	
Professor Sally Green	Co-Director of the Australasian Cochrane Centre and Professorial Fellow School of Public Health & Preventative Medicine, Monash University
Dr Tari Turner	Senior Research Fellow Australian Cochrane Centre, Monash University
<i>Technical Writers</i>	
Ms Jenny Ramson	Technical writer, Ampersand Health Science Writing
Ms Elizabeth Hall	Technical writer, Ampersand Health Science Writing

### 3.2 Module II – 2011-14

Name	Discipline and affiliation/s
<i>Expert Advisory Committee (EAC)</i>	
Professor Caroline Homer Co-Chair	Professor of Midwifery Centre for Midwifery, Child and Family Health, Faculty of Health University of Technology, Sydney
Professor Jeremy Oats Co-Chair	Chair Victorian Consultative Council on Obstetric and Paediatric Mortality and Morbidity Medical Co-Director, Integrated Maternity Services, Northern Territory Professorial Fellow, Melbourne School of Population and Global Health, University of Melbourne
Dr Steve Adair	Director, The Canberra Hospital Obstetric Department
Ms Ann Catchlove	Consumer representative President, Victorian Branch of The Maternity Coalition
Dr Marilyn Clarke	Obstetrician and gynaecologist, New South Wales
Professor Warwick Giles	Honorary Medical Officer in Maternal Fetal Medicine, Royal North Shore Hospital, Sydney Conjoint Professor University of Sydney and University of Newcastle Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Dr Jenny Hunt	Public Health Medical Officer Aboriginal Health and Medical Research Council of New South Wales
Professor Sue McDonald	Professor of Midwifery Women's and Infants Health La Trobe University/Mercy Hospital for Women, Victoria
Dr Henry Murray	Director of Obstetrics Maternal Fetal Medicine subspecialist John Hunter Hospital, Newcastle, New South Wales Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Associate Professor Ruth Stewart	Associate Professor Rural Medicine Director Rural Clinical Training and Support, James Cook University School of Medicine and Dentistry, Townsville, Queensland Australasian College of Rural and Remote Medicine
Dr Anne Sved Williams	Director, Perinatal and Infant Mental Health, Women's and Children's Health Network, South Australia Australasian and New Zealand College of Psychiatrists
<i>Working Group for Aboriginal and Torres Strait Islander Women's Antenatal Care</i>	
Dr Jenny Hunt Co-Chair	Public Health Medical Officer, Aboriginal Health and Medical Research Council of New South Wales
Dr Marilyn Clarke Co-Chair	Obstetrician and gynaecologist, New South Wales
Ms Simone Andy	Koori Maternity Strategy Victorian Aboriginal Community Controlled Health Organisation
Dr Lynore Geia	Adjunct Senior Lecturer (Clinical) School of Nursing, Midwifery & Nutrition James Cook University, Townsville, Queensland
Ms Sue Hendy	Director Nursing and Midwifery Health Education and Training Institute, Sydney

Name	Discipline and affiliation/s
Professor Sue Kildea	Chair of Midwifery Australian Catholic University, Mater Health Service and Mater Research Institute, Brisbane
Ms Leshay Maidment	Branch Manager, Congress Alukura, Alice Springs, Northern Territory
Associate Professor Katie Panaretto	Population Health Medical Officer, Centre for Indigenous Health, University of Queensland Queensland Aboriginal and Islander Health Council
Ms Arimaya Yates	Registered Midwife/ Research Officer Victorian Aboriginal Community Controlled Health Organisation
<i>Working Group for Migrant and Refugee Women's Antenatal Care</i>	
Associate Professor Ruth Stewart Chair	Associate Professor Rural Medicine Director Rural Clinical Training and Support James Cook University School of Medicine and Dentistry, Townsville, Queensland Australasian College of Rural and Remote Medicine
Dr Daniela Costa	General practitioner Member of the Management Committee of the Multicultural Communities Council of South Australia
Ms Andrea Creado	Chief Executive Officer, Ishar Multicultural Women's Health Centre, Perth
Dr Adele Murdolo	Executive Director, Multicultural Centre for Women's Health
Ms Natalija Nesvadba	Manager, Multicultural Services, Mercy Hospital for Women, Melbourne
Ms Assina Ntawumenya	Social Worker, Women's & Children's Health Network President of African Women's Federation, South Australia
Ms Jan Williams	Clinical Services Coordinator, Migrant Health Service South Australia
<i>Project Officers</i>	
Ms Jo Foster	Ms Wendy Cutchie
Ms Julie Hunter	Ms Marlene Eggert
Ms Monica Pflaum	Ms Julie Wheeler
Ms Pippa Robinson	Ms Cecilia Xu
Ms Deb Welsh	
<i>Methodological Consultant</i>	
Ms Philippa Middleton	Australian Research Centre for Health of Women and Babies, Robinson Institute, the University of Adelaide
<i>Technical Writers</i>	
Ms Jenny Ramson	Ampersand Health Science Writing
Ms Elizabeth Hall	Ampersand Health Science Writing

### 3.3 2016-17 review

Expert Working Group Members	Discipline/expertise/special Interest	Position and organisation	Location
<i>Co-chairs</i>			
Professor Jeremy Oats	Obstetrics & Gynaecology	Obstetrician Professorial Fellow Melbourne School of Population & Global Health, University of Melbourne	VIC
Professor Caroline Homer AO	Midwifery	President, Australian College of Midwives Distinguished Professor of Midwifery, University of Technology Sydney	NSW
<i>Members</i>			
Dr Martin Byrne	GP Obstetrics	GP & Chair, GP Obstetric Advisory Committee, RANZCOG	QLD
Ms Ann Catchlove		Consumer representative	VIC
Ms Lisa Clements	Midwifery, Migrant & Refugee Women	Practice Nurse/Midwife & Primary Health Care Manger; Companion House Medical Service	ACT
Dr Anthony Hobbs	GP Obstetrics	Commonwealth Deputy Chief Medical Officer, Department of Health	ACT
Ms Tracy Martin	Midwifery	Chair, Maternity Services Inter-Jurisdictional Committee, Principal Midwifery Advisor, Nursing and Midwifery Office, WA Health	WA
Professor Sue McDonald	Midwifery, Perinatal Health	Professor of Midwifery, La Trobe University	VIC
Dr Sarah Jane McEwan	Obstetrics & Gynaecology, Indigenous Health	District Medical Officer, Hedland Health Campus, South Hedland, WA	WA
Assoc Prof Philippa Middleton	Perinatal Epidemiology	Principal Research Fellow, SA Health and Medical Research Institute/The University of Adelaide	SA
Professor Michael Permezel	Obstetrics & Gynaecology	RANZCOG (former RANZCOG President)	VIC
Professor Steve Robson (from July 2017)	Obstetrics & Gynaecology	President RANZCOG	ACT
Adjunct Professor Debra Thoms	Midwifery	Commonwealth Chief Nursing and Midwifery Officer, Department of Health	ACT

#### Australian Government Department of Health

##### (Project management and secretariat)

Group Members	Position and organisation
Ms Marg Sykes	Assistant Secretary, Primary Healthcare Branch, Health Services Division, Department of Health
Mr Louis Young	Director, Chronic Disease Management Section, Health Services Division, Department of Health
Ms Samantha Diplock	Assistant Director, Maternity Policy Team, Chronic Disease Management Section, Health Services Division, Department of Health
Ms Anita Soar	Policy/Project Officer, Maternity Policy Team, Chronic Disease Management Section, Health Services Division, Department of Health

## Methodologists

Group Members	Position and organisation
Assoc Prof Philippa Middleton	Principal Research Fellow, SA Health and Medical Research Institute/The University of Adelaide
Ms Jenny Ramson	Ampersand Health Science Writing
Ms Emily Shepherd	University of Adelaide

## Technical writer

Group Members	Position and organisation
Ms Jenny Ramson	Ampersand Health Science Writing

The Department of Health and the Expert Working Group would also like to acknowledge the following people who contributed their expertise to the review:

- Professor Greg Dore, Head, Viral Hepatitis Clinical Research Program, Kirby Institute for infection and immunity in society, The University of New South Wales
- Associate Professor Lisa Hui, Department of Obstetrics and Gynaecology, University of Melbourne, Department of Perinatal Medicine, Mercy Hospital for Women, Public Health Genetics group, Murdoch Childrens Research Institute
- Associate Professor Janet Vaughan, Consultant Obstetrician and Obstetrics and Gynaecology Ultrasound Subspecialist, Obstetrics Plus, Sydney.

The Expert Working Group is also grateful to the organisations and individuals who commented on the draft Guidelines through the public consultation process.

## 3.4 2018-19 review

Expert Working Group Members	Discipline/expertise/special interest	Position and organisation	Location
<i>Co-chairs</i>			
Professor Jeremy Oats	Obstetrics & Gynaecology	Obstetrician Professorial Fellow Melbourne School of Population & Global Health, University of Melbourne	VIC
Professor Caroline Homer AO	Midwifery	Co-Director Maternal and Child Health Program, Burnet Institute Distinguished Professor of Midwifery, University of Technology Sydney	NSW
<i>Members</i>			
Dr Martin Byrne	GP Obstetrics	GP & Chair, GP Obstetric Advisory Committee, RANZCOG	QLD
Ms Ann Catchlove (Jorgensen)		Consumer representative	VIC
Dr Marilyn Clarke	Aboriginal and Torres Strait Islander representative	Obstetrics and Gynaecology specialist, Grafton	NSW
Ms Leah Hardiman		Consumer representative	QLD
Ms Tracy Martin	Midwifery	Chair, Maternity Services Inter-Jurisdictional Committee, Principal Midwifery Advisor at the Nursing and Midwifery Office WA Health	WA

Expert Working Group Members	Discipline/expertise/special interest	Position and organisation	Location
Professor Sue McDonald	Midwifery, Perinatal Health	Professor of Midwifery, La Trobe University	VIC
Assoc Prof Philippa Middleton	Perinatal Epidemiology	Principal Research Fellow, Healthy Mothers, Babies and Children SA Health and Medical Research Institute/The University of Adelaide	SA
Ms Natalija Nesvadba	Migrant and refugee women representative	Manager, Multicultural Services, Mercy Hospitals	VIC
Professor Michael Permezel	Obstetrics & Gynaecology	RANZCOG (former RANZCOG President)	VIC
Adjunct Professor Debra Thoms	Midwifery	Commonwealth Chief Nursing and Midwifery Officer, Department of Health	ACT
Ms Cindy Turner	Midwifery	Australian College of Midwives	NT

**Australian Government Department of Health  
(Project management and secretariat)**

Ms Samantha Diplock	Assistant Director, Maternity Policy Team, Chronic Disease Management Section, Health Services Division, Department of Health
Ms Anita Soar	Policy/Project Officer, Maternity Policy Team, Chronic Disease Management Section, Health Services Division, Department of Health

**Methodologists**

Assoc Prof Philippa Middleton	Principal Research Fellow, SA Health and Medical Research Institute/The University of Adelaide
Ms Jenny Ramson	Ampersand Health Science Writing

**Technical writer**

Ms Jenny Ramson	Ampersand Health Science Writing
-----------------	----------------------------------

The Department of Health and the Expert Working Group would also like to acknowledge the Syphilis Enhanced Response Antenatal Care Advisory Group for their contribution to reviewing the topic of syphilis.

The Expert Working Group is also grateful to the organisations and individuals who commented on the draft Guidelines through the public consultation process.

## 4 Terms of reference

### 4.1 Modules I and II

#### 4.1.1 Expert Advisory Committee

The Expert Advisory Committee will convene to:

1. provide advice, expertise and direction on the appropriateness of the guidelines to promote optimal care for pregnant women across Australia.
2. supervise the parties that are commissioned to:
  - a. consult with a number of advisory groups to draft and review evidence-based guidelines as well as national and international literature on antenatal care with specific attention to the health needs of Aboriginal and Torres Strait Islander pregnant women and their families, migrant and refugee women their families and other vulnerable groups
  - b. consult widely to develop evidenced based guidelines that will function as a useful resource for health professionals and will be of interest and relevance to pregnant women and their families in a variety of Australian health care contexts
  - c. undertake analysis of harms and benefits in the Australian context and determine the costs/benefits and cost effectiveness of proposed interventions in accordance with available literature
  - d. produce a dissemination plan for the implementation and determine a process for ongoing monitoring of clinical uptake of the guidelines
3. ensure the guidelines are developed in accordance with the National Health and Medical Research Council (NHMRC) protocols and are approved by the NHMRC.

#### 4.1.2 Working Group for Aboriginal and Torres Strait Islander Women's Antenatal Care

The Working Group will:

1. provide advice, expertise and direction on the appropriateness of the Guidelines to promote optimal care for Aboriginal and Torres Strait Islander pregnant women across Australia
2. review draft evidence-based Guidelines and provide advice to ensure relevance and applicability of the Guidelines to the cultural and health needs of Aboriginal and Torres Strait Islander pregnant women
3. identify additional questions and appropriate sources of evidence
4. identify appropriate sources of evidence relevant to guideline topics, additional to those identified in formal literature searches (this may include grey literature and other unpublished sources)
5. provide advice and draft practice points, where relevant
6. provide advice to the technical writer regarding appropriate terminology and language used throughout the guideline document
7. in consultation with the technical writer contribute to the drafting of a separate guidance around cultural and other issues relevant to antenatal care for Aboriginal and Torres Strait Islander women
8. provide advice regarding the implementation of the Guidelines in settings where Aboriginal and Torres Strait Islander women receive pregnancy care
9. identify areas and topics for future guideline documents
10. provide ideas for making guidelines as practical as possible.

#### 4.1.3 Working Group for Migrant and Refugee Women's Antenatal Care

The Working Group will:

1. provide advice, expertise and direction on the appropriateness of the Guidelines to promote optimal care for migrant and refugee pregnant women across Australia
2. review draft evidence-based Guidelines and provide advice to ensure relevance and applicability of the Guidelines to the cultural and health needs of migrant and refugee pregnant women
3. identify additional questions and appropriate sources of evidence
4. identify appropriate sources of evidence relevant to guideline topics, additional to those identified in formal literature searches (this may include grey literature and other unpublished sources)
5. provide advice and draft practice points, where relevant
6. provide advice to the technical writer regarding appropriate terminology and language used throughout the guideline document
7. in consultation with the technical writer contribute to the drafting of a separate guidance around cultural and other issues relevant to antenatal care for migrant and refugee women
8. provide advice regarding the implementation of the Guidelines in settings where migrant and refugee women receive pregnancy care
9. identify areas and topics for future guideline documents
10. provide ideas for making guidelines as practical as possible.

#### 4.2 2016-17 and 2018-19 reviews

The Expert Working Group will oversee the review and revision of the National Evidence-based Clinical Practice Guidelines – Antenatal Care (incorporating both Modules I and II of the Guidelines). The role of the Expert Working Group will include:

- providing advice, expertise and direction in relation to the combining of the two modules, and the review of the Guidelines to promote optimal care for pregnant women across Australia;
- reviewing the existing Guidelines to identify topics and guidelines that require updating;
- advising on the review of national and international literature on antenatal care to inform amendments required to the existing Guidelines;
- identifying any new topics and drafting new evidence-based guidelines for inclusion in the Guidelines;
- developing a plan and strategies to promote and disseminate the finalised Guidelines to ensure clinical uptake of the Guidelines;
- advising on the development of a consultation strategy (in the event that the review results in major changes to the existing Guidelines or the inclusion of new guidelines); and
- ensuring the review is conducted in accordance with the National Health and Medical Research Council's (NHMRC) protocols and submitted to the NHMRC for approval.

## Acronyms and abbreviations

ANRQ	Antenatal Risk Questionnaire
BMI	body mass index
CBR	consensus-based recommendation
CRL	crown-rump length
EAC	Expert Advisory Committee
EBR	evidence-based recommendation
EPDS	Edinburgh Postnatal Depression Scale
HbA1c	glycated haemoglobin
HIV	human immunodeficiency virus
PP	practice point
QEBR	qualified evidence-based recommendation
RANZCOG	Royal Australian and New Zealand College of Obstetricians and Gynaecologists
NHMRC	National Health and Medical Research Council



#### Related documents

- *Clinical Practice Guidelines: Pregnancy Care*
- *Administrative Report*
- *Linking Evidence to Recommendations*
- *Economic Analyses*

