COPE
Centre of Perinatal Excellence

Mental Health Care in the Perinatal Period

Australian Clinical Practice Guideline

Administrative Report

2023 REVISION

Best Practice COPE Guideline

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Systematic literature review

The systematic literature review that provides the evidence base for the Guideline was conducted by Hereco.

Technical writing

Ampersand Health Science Writing was responsible for drafting and editing the Guideline in consultation with the EWG.

Expiry of the Guideline

The Guideline was submitted to the National Health and Medical Research Council (NHMRC) in March 2023 and approved in April 2023.
Approval for the Guideline by the NHMRC is granted for a period not exceeding 5 years, at which date the approval expires. The NHMRC expects that all guidelines will be reviewed no less than once every 5 years. Readers should check with COPE for any reviews or updates of the Guideline.

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Publication approval

Australian Government
National Health and Medical Research Council

The recommendations on pages xii-xv of the Guideline were approved by the Chief Executive Officer of the National Health and Medical Research Council (NHMRC) on 14 April 2023 under section 14A of the *National Health and Medical Research Council Act 1992*. In approving the Guideline recommendations, NHMRC considers that they meet the NHMRC standard for clinical practice guidelines. This approval is valid or a period of five years.

NHMRC 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.

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1 Scope and purpose

Objectives

The objective of the Australian Clinical Practice Guideline on mental health care in the perinatal period is to guide best practice in the identification, prevention and treatment/management of mental health disorders that may occur during pregnancy or in the first year following the birth of a baby (the perinatal period).

Health intents

The Guideline aims to guide health professionals in the identification of the more common mental health conditions (depression and anxiety) and the prevention and treatment of these conditions through a range of treatment approaches that includes psychosocial and psychological therapies, pharmacological, complementary and physical therapies.

In addition, the Guideline addresses the management of low prevalence, more severe mental illnesses - namely schizophrenia, bipolar disorder, postpartum psychosis, borderline personality disorder and psychological birth trauma. For each of these conditions the Guideline provides guidance in the provision of psychosocial and psychological therapies, pharmacological and physical therapies.

The review of evidence to support the current update of the Guideline recommendations and practice points replicated the review of evidence conducted in support of the 2017 version of the Guideline and covers the following aspects in the birthing parent:

- screening for depressive and anxiety disorders in the perinatal period
- assessing psychosocial factors that affect mental health in the perinatal period
- prevention and treatment of mental health conditions during the perinatal period
- care of those with depressive and anxiety disorders
- care of those with severe mental illnesses such as severe depression, schizophrenia, bipolar disorder and postpartum psychosis
- care of those with borderline personality disorder
- harms to the fetus or breastfeeding infant associated with interventions used for the treatment or prevention of maternal perinatal mental health conditions
- the efficacy and safety of interventions for the prevention and treatment of mental health problems as a result of birth trauma (new topic).

In addition, a separate review covered perinatal mental health assessment in non-birthing partners.

Expected benefits or outcomes

The Guideline aims to:

- improve a women's emotional well-being, experience of pregnancy and early motherhood
- identify current and effective tools for the detection of women most at risk of perinatal mental health conditions (psychosocial assessment) as well as those experiencing symptoms of the more common conditions (screening tools)
- provide advice on perinatal mental health assessment in non-birthing partners
- assess the evidence for interventions used in managing mental health disorders, with a focus on the impact of exposure of the fetus to systemically active treatments (i.e., medications, complementary therapies and some physical therapies).

It is intended that the Guideline will inform local, state and national policy surrounding the timely implementation of appropriate tools to ensure early identification of womens' needs and timely, safe (for mother and baby) and effective intervention. Early detection and management of perinatal mental health conditions will have significant health and economic benefits for the woman, her family and the broader community.

Target population

The population to whom the Guideline applies includes pregnant or postnatal women, with the postnatal period being defined as the 12 months following birth. Specifically, the investigations/interventions of interest are assessed in the following populations:

- **Psychosocial assessment -** all pregnant or postnatal women
- **Screening -** all pregnant or postnatal women
- **Perinatal mental health assessment -** non-birthing partners
- **Interventions -** pregnant or postnatal women who have an existing mental health disorder, or are considered to be at risk of developing a mental health disorder.

As the Guideline also provides an assessment of the harms associated with interventions used for the treatment or prevention of perinatal mental health issues, the population also encompasses the offspring of these women (i.e. the fetus, infant, or child).

Attention is also given to women with a history of mental health issues who might be planning a pregnancy.

Questions

The topics under investigation for this evidence review mirror the three main topics that were addressed in the 2017 version of the Australian Perinatal Mental Health Guideline, with the addition of the new topic birth trauma. The broad topics in the updated Guideline are as follows:

- Maternal psychosocial assessment and screening for mental health problems in the perinatal period
- Treatment and prevention of maternal mental health problems in the perinatal period
- Harms to the fetus or breastfeeding infant from treatments administered to the birthing parent during the perinatal period
- Treatment and prevention of mental health problems in the perinatal period in parents who have experienced birth trauma.

The clinical research questions to focus the Guideline include:

- What are the most appropriate methods for psychosocial assessment of birthing parents at risk of mental health problems in the perinatal period?
- What are the most appropriate methods for screening birthing parents for depression and anxiety in the perinatal period?
- What is the efficacy and safety of interventions for the treatment of mental health problems in birthing parents in the antenatal or postnatal period?
- What is the efficacy and safety of interventions for the prevention of mental health problems in birthing parents identified as being at risk of developing a mental health problem in the antenatal or postnatal period?
- What are the harms to the fetus or breastfeeding infant that occur as a result of perinatal exposure to pharmacological interventions, complementary interventions or physical interventions used for the treatment or prevention of mental health problems?
- What is the efficacy and safety of interventions in the perinatal period for the prevention of mental health problems for parents who have experienced birth trauma?
- What is the efficacy and safety of interventions for the treatment of mental health problems in the perinatal period for parents who have experienced birth trauma?

The clinical research questions are summarised in Table 4. Detailed Population Intervention Comparison Outcome (PICO) criteria are included in Table 5.

Table 4 Clinical research questions

PSYCHOSOCIAL ASSESSMENT IN WOMEN	
Main question	What are the most appropriate methods for psychosocial assessment of the birthing parent at risk of mental health problems in the perinatal period?
Sub-questions	What is the performance (defined as reliability, validity, and accuracy) of validated multidimensional tools for perinatal psychosocial assessment?
	What are the non-technical characteristics (defined as number of items, time to administer, perinatal/postnatal timing, complexity of scoring, training requirements, and available languages) of validated multidimensional tools for perinatal psychosocial assessment?
	What is the acceptability to the birthing parent, health professionals, and the general public of validated multidimensional tools for perinatal psychosocial assessment?
	What is the effectiveness (defined as impact on detection, care sought or received, and mental health outcomes) of perinatal psychosocial assessment with validated multidimensional tools?
	What are the implications (for resourcing, workforce, and models of care) of implementing perinatal psychosocial assessment (via different modes of delivery) with a validated multidimensional tool?
DEPRESSION SCREENING IN WOMEN	
Main question	What are the most appropriate methods for screening the birthing parent for depression in the perinatal period?
Sub-questions	What is the performance (defined as reliability, sensitivity, specificity, positive likelihood ratio, and negative likelihood ratio) of validated tools for perinatal depression screening?
	What are the non-technical characteristics (defined as number of items, time to administer, perinatal/postnatal timing, complexity of scoring, training requirements, and available languages) of validated tools for perinatal depression screening?
	What is the acceptability to the birthing parent, health professionals, and the general public of screening for perinatal depression?
	What is the effectiveness (defined as impact on detection, care sought or received, and mental health outcomes) of screening for perinatal depression?
	What are the implications (for resourcing, workforce, and models of care) of implementing perinatal depression screening (via different modes of delivery) with a validated tool?
ANXIETY SCREENING IN WOMEN	
Main question	What are the most appropriate methods for screening the birthing parent for anxiety in the perinatal period?
Sub-questions	What is the performance (defined as reliability, sensitivity, specificity, positive likelihood ratio, and negative likelihood ratio) of validated tools for perinatal anxiety screening?
	What are the non-technical characteristics (defined as number of items, time to administer, perinatal/postnatal timing, complexity of scoring, training requirements, and available languages) of validated tools for perinatal anxiety screening?
	What is the acceptability to the birthing parent, health professionals, and the general public of screening for perinatal anxiety?
	What is the effectiveness (defined as impact on detection, care sought or received, and mental health outcomes) of screening for perinatal anxiety?
	What are the implications (for resourcing, workforce, and models of care) of implementing perinatal anxiety screening (via different modes of delivery) with a validated tool?

PERINATAL MENTAL HEALTH ASSESSMENT IN NON-BIRTHING PARTNERS	
Q1	What are the most appropriate methods for psychosocial assessment of fathers or non-birthing partners at risk of mental health problems in the perinatal period?
Q1a	What is the performance (defined as reliability, validity and accuracy) of multidimensional tools for perinatal psychosocial assessment?
Q1b	What are the non-technical characteristics (defined as number of items, time to administer, perinatal/postnatal timing, mode of delivery, validation, complexity of scoring, training requirements, and available languages) of multidimensional tools for perinatal psychosocial assessment?
Q1c	What is the acceptability to fathers/non-birthing partners, health professionals, and the general public of multidimensional tools for perinatal psychosocial assessment?
Q1d	What are the implications (for resourcing, workforce, and models of care) of implementing perinatal psychosocial assessment (via different modes of delivery) with a multidimensional tool?
Q2	What are the most appropriate methods for screening fathers or non-birthing partners for mental health problems in the perinatal period?
Q2a	What is the performance (defined as reliability, sensitivity, specificity, positive likelihood ratio, and negative likelihood ratio) of tools for perinatal mental health screening?
Q2b	What are the non-technical characteristics (defined as number of items, time to administer, perinatal/postnatal timing, mode of delivery, validation, complexity of scoring, training requirements, and available languages) of tools for perinatal mental health screening?
Q2c	What is the acceptability to fathers/non-birthing partners, health professionals, and the general public of screening for perinatal mental health screening?
Q2d	What is the effectiveness (defined as impact on detection, care sought or received, and mental health outcomes) of screening for perinatal mental health screening?
Q2e	What are the implications (for resourcing, workforce, and models of care) of implementing perinatal mental health screening (via different modes of delivery) with a tool?
MENTAL HEALTH - TREATMENT INTERVENTIONS FOR WOMEN	
Main question	What is the efficacy and safety of interventions for the treatment of mental health problems in the birthing parent in the antenatal or postnatal period?
Sub-questions	What is the efficacy and safety of psychosocial interventions for the treatment of mental health problems in the birthing parent in the antenatal or postnatal period?
	What is the efficacy and safety of psychological interventions for the treatment of mental health problems in the birthing parent in the antenatal or postnatal period?
	What is the efficacy and safety of online interventions for the treatment of mental health problems in the birthing parent in the antenatal or postnatal period?
	What is the efficacy and safety of pharmacological interventions for the treatment of mental health problems in the birthing parent in the antenatal or postnatal period?
	What is the efficacy and safety of complementary interventions for the treatment of mental health problems in the birthing parent in the antenatal or postnatal period?
	What is the efficacy and safety of physical interventions for the treatment of mental health problems in the birthing parent in the antenatal or postnatal period?

MENTAL HEALTH PREVENTION INTERVENTIONS AMONG WOMEN	
Main question	What is the efficacy and safety of interventions for the prevention of mental health problems in the birthing parent identified as being at risk of developing a mental health problem in the antenatal or postnatal period?
Sub-questions	What is the efficacy and safety of psychosocial interventions for the prevention of mental health problems in the birthing parent identified as being at risk of developing a mental health problem in the antenatal or postnatal period?
	What is the efficacy and safety of psychological interventions for the prevention of mental health problems in the birthing parent identified as being at risk of developing a mental health problem in the antenatal or postnatal period?
	What is the efficacy and safety of online interventions for the prevention of mental health problems in the birthing parent identified as being at risk of developing a mental health problem in the antenatal or postnatal period?
	What is the efficacy and safety of pharmacological interventions for the prevention of mental health problems in the birthing parent identified as being at risk of developing a mental health problem in the antenatal or postnatal period?
	What is the efficacy and safety of complementary interventions for the prevention of mental health problems in the birthing parent identified as being at risk of developing a mental health problem in the antenatal or postnatal period?
	What is the efficacy and safety of physical interventions for the prevention of mental health problems in the birthing parent identified as being at risk of developing a mental health problem in the antenatal or postnatal period?
HARMS	
Main question	What are the harms to the fetus or breastfeeding infant that occur as a result of perinatal exposure to pharmacological interventions, complementary interventions and physical interventions used for the treatment or prevention of mental health problems?
Sub-questions	What are the harms that occur to the fetus (defined as malformations) as a result of perinatal exposure to pharmacological, complementary and physical interventions used for the treatment or prevention of mental health problems?
	What are the harms that occur to the infant (defined as pregnancy and birth outcomes) as a result of perinatal exposure to pharmacological, complementary and physical interventions used for the treatment or prevention of mental health problems?
	What are the harms that occur to the child (defined as neurodevelopmental outcomes) as a result of perinatal exposure to pharmacological, complementary and physical interventions used for the treatment or prevention of mental health problems?
	What are the harms that occur to the mother (defined as postpartum haemorrhage) as a result of perinatal exposure to pharmacological, complementary and physical interventions used for the treatment or prevention of mental health problems?
	What is the efficacy and safety of complementary interventions for the treatment of mental health problems in the birthing parent in the antenatal or postnatal period?
	What is the efficacy and safety of physical interventions for the treatment of mental health problems in the birthing parent in the antenatal or postnatal period?

BIRTH TRAUMA - PREVENTION INTERVENTIONS	
Main question	What is the efficacy and safety of interventions[1] in the perinatal period for the prevention of mental health problems for parents who have experienced birth trauma (associated with the current or a previous pregnancy)?
Sub-questions	What is the efficacy and safety of interventions for the prevention of mental health problems in the birthing parent or non-birthing partners who have experienced birth trauma associated with the current or a previous pregnancy?
	What is the acceptability to birthing parents, health professionals, and the general public about interventions used to prevent mental health problems related to birth trauma?
	What are the implications (for resourcing, workforce, and models of care) of implementing prevention interventions for parents who have experienced birth trauma?
BIRTH TRAUMA - TREATMENT INTERVENTIONS	
Main question	What is the efficacy and safety of interventions[2] for the treatment of mental health problems in the perinatal period for parents who have experienced birth trauma (associated with the current or a previous pregnancy)?
Sub-questions	What is the efficacy and safety of interventions for the treatment of mental health problems in the perinatal period for parents who have experienced birth trauma?
	What is the acceptability to parents, health professionals, and the general public about interventions used to treat mental health problems related to birth trauma?
	What are the implications (for resourcing, workforce, and models of care) of implementing treatment interventions for parents who have experienced birth trauma?

Footnotes:

1 Interventions and approaches might include but not be limited to psychosocial interventions, psychological interventions (e.g., trauma focused cognitive behavioural therapy), pharmacological interventions (anti-depressant medication such as selective serotonin reuptake inhibitors [SSRIs]).

2 Interventions and approaches might include but not be limited to psychosocial interventions, psychological interventions (e.g., counselling; trauma-focused cognitive behavioural therapy [CBT]; eye movement desensitisation and reprocessing [EMDR]), pharmacological interventions (anti-depressant medication such as SSRIs), complementary interventions or physical interventions.

Table 5 Detailed PICO criteria

QUESTIONS PERTAINING TO WOMEN	
Question 1	**What are the most appropriate methods for psychosocial assessment of birthing parents at risk of mental health problems in the perinatal period?**
Population	Pregnant or postnatal women (birthing parent) **Subgroups of interest:** • Aboriginal and/or Torres Strait Islander pregnant or postnatal women • Refugee and asylum seeker pregnant or postnatal women • Pregnant or postnatal women from migrant or CALD background • LGBTQI+ birthing parents and non-birthing partners with or without a previous history of abuse
Intervention	Validated psychosocial assessment tools to identify people at risk of mental health problems in the perinatal period • Limited to tools investigated in the 2017 Australian Guideline (ALPHA, ANRQ, ARPA, CAME[A], CAN-M[B], PNRQ, PRQ and the revised versions of the ANRQ and PNRQ (ANRQ-R and PNRQ-R), and the KMMS
Comparator	• Subsequent manifestation of mental health issues or any standard clinical/diagnostic interview as a reference standard
Outcomes	**Tool performance:** <u>Critical outcomes</u> • Validity • Reliability • Predictive accuracy (OR odds of identifying a factor of concern) <u>Critical outcomes</u> • Sensitivity • Specificity **Clinical usefulness:** <u>Critical outcomes</u> • Validity • Reliability • Acceptability to pregnant or postnatal women, to healthcare providers, to the general public

Abbreviations: ALPHA, Antenatal Psychosocial Health Assessment; ANRQ, Antenatal Risk Questionnaire; ANRQ-R, Antenatal Risk Questionnaire - Revised; ARPA, Antenatal Routine Psychosocial Assessment; CALD, culturally and linguistically diverse; CAME, Contextual Assessment of Maternity Experience; CAN-M, Camberwell Assessment of Need-Mothers; KMMS, Kimberly Mum's Mood Scale; LQBTQI+, lesbian, gay, bisexual, transgender, queer/questioning, intersex; PNRQ, Postnatal Risk Questionnaire; PNRQ-R, Postnatal Risk Questionnaire - Revised; PRQ, Pregnancy Risk Questionnaire.

Footnotes:

[A] The CAME has been developed and tested in women known to be at high risk, namely women with past or current major depressive disorder, and women living in poverty. Women with a history of MDD and women living in poverty comprise a subset of the target population.

[B] The CAN-M has been designed for use in pregnant women and mothers with current severe mental illness who are already receiving mental health care, which is very different to the target population for the current Guideline (women under routine antenatal care with unknown past or current mental health status) behavioural therapy [CBT]; eye movement desensitisation and reprocessing [EMDR]), pharmacological interventions (anti-depressant medication such as SSRIs), complementary interventions or physical interventions.

Question 2	What are the most appropriate methods for screening the birthing parent for depression in the perinatal period?
Population	Pregnant or postnatal women (birthing parent) **Subgroups of interest:** • Aboriginal and/or Torres Strait Islander pregnant or postnatal women • Refugee and asylum seeker pregnant or postnatal women • Pregnant or postnatal women from migrant or CALD background • LGBTQI+ birthing parents and non-birthing partners with or without a previous history of abuse
Intervention	Validated screening tools to identify people with depression in the perinatal period • Limited to tools investigated in the Australian Guideline (EPDS, PHQ [PHQ-2 or PHQ-9], K10, Whooley questions) and the HADS
Comparator	• Any type of standardised diagnostic interview, defined as a structured interview (such as the SCID, CIDI or MINI) delivered by trained staff, or an ICD mental health diagnosis by a psychiatrist or clinical psychologist • A different screening tool (from the list above)
Outcomes	**Tool performance:** <u>Critical outcomes</u> • Positive Likelihood Ratio (LR+) • Negative Likelihood Ratio (LR-) • AUROC <u>Critical outcomes</u> • Sensitivity • Specificity • Youden's index **Clinical usefulness:** <u>Critical outcomes</u> • Acceptability to women, to healthcare providers, to the general public • Mental health outcomes <u>Important outcomes</u> • Impact on help-seeking behaviour (services sought or utilised) • Impact of detection (e.g., referral rates if screen positive)

Abbreviations: AUROC, area under the receiver-operating characteristics curve; CIDI, Composite International Diagnostic Interview; DASS-21, Depression Anxiety Stress Scales; DSM, Diagnostic and Statistical Manual of Mental Disorders; EPDS, Edinburgh Postnatal Depression Scale; HADS, Hospital Anxiety and Depression Scale; ICD, International Statistical Classification of Diseases and Related Health Problems; K10, Kessler Psychological Distress Scale (10 item); LQBTQI+, lesbian, gay, bisexual, transgender, queer/questioning, intersex; MINI, Mini-International Neuropsychiatric Interview; PHQ-2, first 2 items of the PHQ-9; PHQ-9, Patient Health Questionnaire-9; SCID, Structured Clinical Interview for DSM Disorders.

Question 3	What are the most appropriate methods for screening the birthing parent for anxiety in the perinatal period?
Population	Pregnant or postnatal women (birthing parent) **Subgroups of interest:** • Aboriginal and/or Torres Strait Islander pregnant or postnatal women • Refugee and asylum seeker pregnant or postnatal women • Pregnant or postnatal women from migrant or CALD background • LGBTQI+ birthing parents and non-birthing partners with or without a previous history of abuse
Intervention	Validated screening tools to identify people with anxiety in the perinatal period • Limited to tools investigated in the 2017 Australian Guideline (EPDS, DASS-21, GAD-2/GAD-7, GHQ, HADS, HADS-A, K10, STAI) or the ANRQ-2A
Comparator	• Any type of standardised diagnostic interview, defined as a structured interview (such as the SCID, CIDI or MINI delivered by trained staff, or an ICD mental health diagnosis by a psychiatrist or clinical psychologist • A different screening tool (from the list above)
Outcomes	**Tool performance:** <u>Critical outcomes</u> • Positive Likelihood Ratio (LR+) • Negative Likelihood Ratio (LR-) • AUROC <u>Critical outcomes</u> • Sensitivity • Specificity **Clinical usefulness:** <u>Critical outcomes</u> • Acceptability to women, to healthcare providers, to the general public • Mental health outcomes <u>Important outcomes</u> • Impact on help-seeking behaviour (services sought or utilised) • Impact of detection (e.g., referral rates if screen positive)

Abbreviations: ANRQ-2A, 2 'anxiety' items from the Antenatal Risk Questionnaire; AUROC, area under the receiver-operating characteristics curve; CIDI, Composite International Diagnostic Interview; DASS-21, Depression Anxiety Stress Scales; DSM, Diagnostic and Statistical Manual of Mental Disorders; EPDS, Edinburgh Postnatal Depression Scale; GAD-2, Generalized Anxiety Disorder 2-item scale; GAD-7, Generalized Anxiety Disorder 7-item scale; GHQ, General Health Questionnaire; HADS, Hospital Anxiety and Depression Scale; HADS-A, Hospital Anxiety and Depression Scale - Anxiety subscale; ICD, International Statistical Classification of Diseases and Related Health Problems; K10, Kessler Psychological Distress Scale (10 item); LQBTQI+, lesbian, gay, bisexual, transgender, queer/questioning, intersex; MINI, Mini-International Neuropsychiatric Interview; STAI, State-Trait Anxiety Inventory; SCID, Structured Clinical Interview for DSM Disorders.

Question 4	**What is the efficacy and safety of interventions for the treatment of mental health problems in birthing parents in the antenatal or postnatal period?**
Question 5	**What is the efficacy and safety of interventions for the prevention of mental health problems in birthing parents identified as being at risk of developing a mental health problem in the antenatal or postnatal period?**
Population	Pregnant or postnatal women who: • have an existing mental health problem (Q4 treatment) • are considered to be at risk of developing a health problem (Q5 prevention)
Intervention	• Psychosocial interventions • Psychological interventions • Online interventions • Pharmacological interventions • Complementary interventions • Physical interventions
Comparator	• Treatment as usual • Enhanced treatment as usual • No treatment/placebo or waitlist control • Other active interventions
Outcomes	<u>Maternal mental health symptomatology or diagnosis</u> • Depression/anxiety/PTSD diagnosis • Depression/anxiety/PTSD symptomatology • Negative thoughts/mood <u>Mother-infant interactions</u> • Mother-infant attachment problems • Positive mother-infant interaction • Maternal sensitivity <u>Safety</u> • Side effects

Abbreviations: PTSD, post-traumatic stress disorder.

Notes: Specific psychosocial, psychological, online, pharmacological, complementary and physical interventions are listed in Table 3 in the Guideline.

Question 6	**What are the harms to the fetus or breastfeeding infant that occur as a result of perinatal exposure to pharmacological interventions, complementary interventions and physical interventions used for the treatment or prevention of mental health problems?**
Population	• Pregnant or postpartum/postnatal women (birthing parent) • Infants or children exposed during pregnancy or postnatally
Intervention	Pharmacological • antidepressants, antipsychotics, mood stabilisers (including anticonvulsants, benzodiazepines and z-drugs), lithium Complementary • Omega-3 fatty acids, St John's Wort, Ginkgo biloba Physical • ECT, TMS
Comparator	• No exposure • Exposure to an active comparator
Outcomes	**Fetal, infant or child harms:** <u>Malformations</u> • Major malformations • Cardiac malformations • Septal malformations <u>Pregnancy and birth outcomes</u> • Neonatal mortality • Stillbirth • Miscarriage • Preterm birth • SFGA/IUGR • PNAS • Persistent pulmonary hypertension • Respiratory distress • Tremors • Convulsions <u>Neurodevelopmental outcomes</u> • Autism spectrum disorder • ADHD • Other disorders measured with validated instruments • Intelligence quotient • Behavioural problems • Depression • Anxiety **Maternal harms:** • Postpartum haemorrhage

Abbreviations: ADHD, attention deficit hyperactivity disorder, ECT, electroconvulsive therapy; IUGR, intrauterine growth restriction; PNAS, poor neonatal adaptation syndrome; SFGA, small for gestational age; TMS, transcranial magnetic stimulation.

QUESTIONS PERTAINING TO FATHERS AND NON-BIRTHING PARTNERS	
Question 1	**What is the most appropriate method for psychosocial assessment of fathers or non-birthing partners at risk of mental health problems in the perinatal period?**
Population	Expectant or new non-birthing partners, regardless of relationship status, gender, and relationship to the child Includes: • fathers • co-parents • step-parents or other non-birthing partners of gestational parents **Subgroups of interest:** • Previous mental health problems and/or a history of trauma • Aboriginal and/or Torres Strait Islander peoples • Refugee and asylum seekers • Migrant or CALD backgrounds
Intervention	Relevant multidimensional psychosocial assessment tools to identify people at risk of mental health problems in the perinatal period • Limited to ALPHA, ANRQ, BRO, PAT, PAT-2, PRQ
Comparator	• Any type of standardised diagnostic interview, defined as a structured interview (such as the SCID, CIDI or MINI) delivered by trained staff, or an ICD mental health diagnosis by a psychiatrist or clinical psychologist • A different psychosocial assessment or symptom-based tool (from the list above)
Outcomes	**Tool performance:** <u>Critical outcomes</u> • Predictive accuracy (OR odds of identifying a factor of concern) • Positive Predictive Value (PPV) • Negative Predictive Value (NPV) • Positive Likelihood Ratio (LR+) • Negative Likelihood Ratio (LR-) <u>Critical outcomes</u> • Sensitivity • Specificity • AUROC **Clinical usefulness:** <u>Critical outcomes</u> • Acceptability to fathers & non-birthing partners, to healthcare providers, to the general public
Additional information & data extraction	• Evaluation of applicability (country, setting and availability of normative data) <u>Inclusion of non-technical characteristics</u> • Number of items • Time to administer • Perinatal/postnatal timing • Mode of delivery • Validation • Complexity of scoring • Training requirements • Available languages <u>Information on practice implications</u> • Resourcing (e.g., who funds the delivery of psychosocial assessment) • Workforce (e.g., who delivers the psychosocial assessment) • Models of care (e.g., systems for referral/pathways to care)

Abbreviations: ALPHA, Antenatal Psychosocial Health Assessment; ANRQ, Antenatal Risk Questionnaire; AUROC, Area Under the Receiver Operator Characteristic; BRO, Brief Risk Overview; CALD, culturally and linguistically diverse; CIDI, Composite International Diagnostic Interview; DSM, Diagnostic and Statistical Manual of Mental Disorders; ICD, International Classification of Diseases; MINI, Mini-International Neuropsychiatric Interview; OR, odds ratio; PAT/PAT-2, Psychosocial Assessment Tool; PRQ, Pregnancy Risk Questionnaire; SCID, Structured Clinical Interview for DSM.

Question 2	**What are the most appropriate methods for screening fathers or non-birthing partners for mental health problems in the perinatal period?**
Population	Expectant or new non-birthing partners, regardless of relationship status, gender, and relationship to the child Includes: • fathers • co-parents • step-parents or other non-birthing partners of gestational parents **Subgroups of interest:** • Previous mental health problems and/or a history of trauma • Aboriginal and/or Torres Strait Islander peoples • Refugee and asylum seekers • Migrant or CALD backgrounds
Intervention	Relevant screening tools to identify people with current mental health problems in the perinatal period • Limited to BDI, DASS-21, EPDS, GAD-7, GMDS, K-6, K10, MGMQ, PHQ-2 (Whooley questions), PHQ-9, STAI
Comparator	• Any type of standardised diagnostic interview, defined as a structured interview (such as the SCID, CIDI or MINI delivered by trained staff, or an ICD mental health diagnosis by a psychiatrist or clinical psychologist • A different screening tool (from the list above)
Outcomes	**Tool performance:** <u>Critical outcomes</u> • Sensitivity • Specificity • Positive likelihood ratio (LR+) • Negative likelihood ratio (LR-) <u>Critical outcomes</u> • AUROC **Clinical usefulness:** <u>Critical outcomes</u> • Mental health outcomes • Acceptability to fathers & non-birthing partners, to healthcare providers, to the general public <u>Important outcomes</u> • Impact on help-seeking behaviour (services sought or utilised) • Impact of detection (e.g., referral rates if screen positive)
Additional information & data extraction	• Evaluation of applicability (country, setting and availability of normative data) <u>Inclusion of non-technical characteristics</u> • Number of items • Time to administer • Perinatal/postnatal timing • Mode of delivery • Complexity of scoring • Training requirements • Available languages <u>Information on practice implications</u> • Resourcing (e.g., who funds the delivery of screening) • Workforce (e.g., who delivers the screening) • Models of care (e.g., systems for referral/pathways to care)

Abbreviations: AUROC, Area Under the Receiver Operating Characteristic; BDI, Beck Depression Inventory; CALD, culturally and linguistically diverse; CIDI, Composite International Diagnostic Interview; DASS-21, Depression Anxiety Stress Scales; DSM, Diagnostic and Statistical Manual of Mental Disorders; EPDS, Edinburgh Postnatal Depression Scale; GAD-7, General Anxiety Disorder-7; GMDS, Gotland Male Depression Scale; ICD, International Classification of Diseases; K10/K-6, Kessler Psychological Distress Scale (10 item/6-item); MGMQ, Matthey Generic Mood Question; MINI, Mini-International Neuropsychiatric Interview; PHQ, Patient Health Questionnaire; STAI, State-Trait Anxiety Inventory; SCID, Structured Clinical Interview for DSM.

Table 6 Eligible psychosocial, psychological, online, pharmacological, complementary and physical interventions

PSYCHOSOCIAL	PSYCHOLOGICAL	ONLINE
Psychoeducation	Structured psychological interventions (cognitive behavioural therapy and interpersonal psychotherapy)	Web-based and computer-based online programs • Guided • Self-guided/unguided
Psychoeducational booklet	Directive counselling	
Social/peer support	Non-directive counselling	
Online peer-to-peer support	Case management/individualised treatment	
Home visits	Self-help or facilitated self-help	
Non-mental health-focused education and support	Post-traumatic birth counselling	
Pre-delivery discussion	Post-miscarriage counselling	
Post-delivery discussion	Mother-infant relationship interventions	
Post-miscarriage self-help	Eye movement desensitisation and reprocessing	
Seeing and/or holding stillborn infant	Acceptance and commitment therapy	
Co-parenting interventions	Mindfulness	
PHARMACOLOGICAL	**COMPLEMENTARY**	**PHYSICAL**
Antidepressants	Omega-3 fatty acids	Exercise
Antipsychotics	St John's Wort	Yoga
Mood stabilisers	Ginkgo biloba	Acupuncture
Anticonvulsants		Electroconvulsive therapy
Benzodiazepines and z-drugs		Transcranial magnetic stimulation
Lithium		Meditation
Dexamphetamine		

Population

Please refer to Table 3 in the Guideline.

2 Stakeholder involvement

This is the third version of the Australian Perinatal Mental Health Guideline, with the foundation laid by the first version developed by beyondblue in 2011 and the scope broadened to include schizophrenia and borderline personality disorder as well as depressive and anxiety disorders, bipolar disorder and postpartum psychosis in the Guideline developed by the Centre of Perinatal Excellence (COPE) in 2017.

The development of this version was also undertaken by COPE, with funding from the Australian Government Department of Health and Aged Care and developed in accordance with National Health and Medical Research Council (NHMRC) Guideline development processes. This involved convening an Expert Working Group comprising members nominated by their professional college, with specific expertise in mental health care, as well as representatives of maternity care (including general practice, obstetrics, midwifery and maternal and child health), consumer and carer organisations and Aboriginal and Torres Strait Islander health care. An expert subcommittee was also convened to provide specific advice on harms associated with pharmacological treatments.

Formal consultation with a wide range of experts, stakeholders and consumer representatives was undertaken through the public consultation process and the Guideline was revised to incorporate comments received.

Group membership

Please see Appendix A in the Guideline.

Target population preferences and views

Capturing consumer perspectives

The establishment of the EWG with dedicated consumer and carer representation was considered fundamental to the inclusion of consumer and carer perspectives in the development of the Guideline. In particular the appointment of representatives from Australia's peak perinatal consumer body (PANDA) ensured that the perspectives of many consumers were included at the EWG level. It is also noted that a number of representatives brought to the table expertise and insights from the lived experience of perinatal mental health.

In addition, the perspectives of consumers and carers were actively sought through the consultation process.

Capturing perspectives of specific groups

Aboriginal and/or Torres Strait Islander perspectives were captured through the inclusion of an EWG representative from Aboriginal and/or Torres Strait Islander background, who was also a health professional with a specialist background in perinatal mental health. As with all other members of the EWG, the representative was nominated on behalf of a specific organisation (Congress of Aboriginal and Torres Strait Islander Nurses and Midwives; CATSINaM).

Target users

The Guideline is intended for all health professionals caring for women and families during the perinatal period. This includes but is not limited to midwives, general practitioners (GPs), obstetricians, neonatologists, paediatricians, maternal and child health nurses, paediatric nurses, Aboriginal and/or Torres Strait Islander health workers, allied health professionals, mental health practitioners (psychologists, psychiatrists, mental health nurses, perinatal and infant mental health professionals), consumers and carers and those working with families in the community (e.g. social workers, child protection agencies), hospital and legal systems.

The Guideline will be used by each of the professional groups in accordance with their role in the management of perinatal health. For example, those involved at the front-end of maternity and postnatal care provision (GPs, midwives and obstetricians, maternal and family health nurses) will be informed about best practice screening and assessment tools to identify and respond to identified mental health problems in pregnancy. Professionals involved in the provision of treatment for mental health conditions (psychiatrists, psychologists, GPs, mental health nurses) will likely refer to the information surrounding safe and effective treatments for perinatal mental health conditions. Consumers and carers will also refer to the Guideline to obtain information about the assessment of risk and symptom detection, as well as recommended safe and effective treatments for perinatal mental health conditions.

3 Rigour of development

This section provides a brief outline of the process for reviewing the evidence. Full details on the process are available in the Technical Reports, which will be available on the COPE website.

Search methods

Screening, psychosocial assessment and intervention (effectiveness and harms)

The evidence review conducted to support the 2017 version of the Australian Perinatal Mental Health Guideline was updated for the Guideline update. Literature searches were performed to identify relevant new evidence relating to the pre-specified research questions for psychosocial assessment, depression and anxiety screening, and treatment and prevention interventions for mental health problems seen during the perinatal period (depression, anxiety, schizophrenia, and bipolar disorder). The searches were conducted in February and March 2022 according to three main topics: psychosocial assessment, depression screening and anxiety screening; treatment and prevention interventions; and harms. Further details regarding the search strategy and literature search dates are available in the Technical Reports.

Articles recommended by the EWG were considered for inclusion if they met the pre-specified eligibility criteria, or they could be used for reference in the background or narrative sections of the Guideline.

Birth trauma

A review was undertaken to identify and evaluate national and international birth trauma or PTSD clinical practice guidelines to support the development of recommendations on the prevention and management of mental health problems (including PTSD) following birth trauma.

A variety of guideline-related electronic databases and websites were searched for potentially relevant national or international guidelines published and/or endorsed by reputable organisations since 1 January 2006, with the aim of covering all the topics in scope (birth trauma and PTSD). The search was restricted to English-language clinical practice guidelines. The guideline databases searched included the National Health and Medical Research (NHMRC) Australian Clinical Practice Guidelines Portal (now decommissioned), the **Trip database** and the Guidelines International Network (GIN) **International Guidelines Library**. A Google search was also caried out to identify any birth trauma or PTSD guidelines developed by Australian medical colleges or State health departments. Further to electronic searches, EWG members were consulted to identify any other current clinical practice guidelines or appropriate sources to search for such guidelines, such as Australian peak health body websites.

The aim of the guideline assessment process was to identify the highest quality, most relevant guidelines on birth trauma or PTSD that had relevant recommendations that could be adopted or adapted for the Guidelines. There was a preference for Australian guidelines over international guidelines as they are more likely to be relevant to the Australian health care context.

Evidence selection criteria

The main inclusion/exclusion criteria for each of the research question types were as follows:

Psychosocial assessment and screening

- **Target population -** pregnant or postnatal women
- **Comparisons -** subsequent manifestation of mental health issues, or any standard clinical/diagnostic interview as a reference standard (psychosocial assessment); any standardised diagnostic interview by trained staff or ICD mental health diagnosis by psychiatrist or clinical psychologist, or a different screening tool (from the pre-specified intervention list) (screening)
- **Language -** limited to English

Effectiveness of interventions

- **Target population -** pregnant or postnatal women diagnosed with a mental health problem, or considered to be at risk of developing a mental health problem
- **Study design -** RCTs
- **Interventions -** Psychosocial, psychological, pharmacological, complementary, online or physical interventions used to treat or prevent mental health problems in pregnant or postnatal women
- **Comparisons -** no exposure or exposure to an active comparator
- **Language -** limited to English

Harms of intervention

- **Target population -** pregnant or postnatal women diagnosed with a mental health problem, or considered to be at risk of developing a mental health problem, or a fetus, infant or child of a mother exposed to a pharmacological, complementary or physical therapy
- **Study design -** SRs of RCTs (if available), SRs of observational studies, or individual observational studies if no SR or SR out of date or unsuitable
- **Comparisons -** no exposure or exposure to an active comparator
- **Language -** limited to English

Strengths and limitations of the evidence

The strengths and limitations of the evidence have been considered from the perspective of the individual studies and the body of evidence aggregated across all the studies. Wherever possible validated methods have been used to assess:

- study design(s)
- study methodology limitations (sampling, blinding, allocation concealment, analytical methods)
- appropriateness/relevance of primary and secondary outcomes
- consistency of results across studies
- direction of results across studies
- magnitude of benefit versus magnitude of harm
- applicability to practice context.

The GRADE methodology was used to determine the quality of the evidence available for each intervention/outcome.

Consistent with the 2017 Guideline, a hybrid method was developed for quality appraisal of psychosocial assessment instruments, and is described in detail in Part B of the Technical Report.

Formulation of recommendations

The recommendations in the Guideline are derived from those in the 2017 Australian Guideline, some of which were revised in the light of new evidence or to improve clarity. In reviewing the recommendations, committee members considered benefits and harms, certainty of the evidence, preferences and values, resources, equity, acceptability and feasibility. Any proposed changes to the wording of evidence-based or consensus-based recommendations were agreed through a process by which:

- the guideline methodologists advised on aspects of a recommendation that could be changed to better reflect the evidence or improve clarity
- committee members proposed wording changes, these were discussed and refined until there was general agreement among attending committee members
- wording changes were noted and circulated (in the form of meeting minutes) by email to ensure members not in attendance could contribute to the wording.

Recommendations on screening and psychosocial risk assessment

The Expert Working Group met on 12 September 2022 and reviewed the 2017 Australian Guideline recommendations on screening for depressive and anxiety disorders and on psychosocial assessment. The EWG acknowledged that the new evidence available for technical performance of depression and anxiety screening tools was of very low to low certainty. The importance of using clinical judgement was highlighted by the EWG, which informed changes to CBR vi. Other minor amendments to recommendations and the rationale for the changes are outlined in Tables 7, 10, 11 and 13.

Recommendations on perinatal mental health assessment non-birthing partners

A set of draft consensus-based recommendations was developed by the Fathers and Partners Expert Advisory Committee (FPEAC) based on a mixed-method review. The approach included the use of systematic reviews of quantitative evidence (e.g., screening test performance), descriptions of non-technical characteristics of the tests (e.g., time to administer, complexity of scoring), and narrative reviews of acceptability, effectiveness and implementation issues associated with perinatal mental health assessment in non-birthing partners. The draft consensus-based recommendations were subsequently revised for consistency with the approach used in the Guideline and reviewed and agreed by the EWG. The process of the review and the development of consensus-based recommendations is described in Tables 14 and 15.

Recommendation on postnatal care and support

The EWG met on 29 August 2022 and reviewed the 2017 Australian Guideline recommendations and practice points on assessing mother-infant interaction, assessing risk of suicide, supporting emotional health and well-being and postnatal care and support. The EWG agreed that the wording of the existing recommendations was appropriate, with a minor change to CBR xxvii (see Table 21).

Recommendations on interventions for prevention and treatment

The Expert Working Group met on 29 August 2022 and reviewed the 2017 Australian Guideline recommendations on psychosocial and psychological interventions, general principles in prevention and treatment and general principles in the use of pharmacological treatments. The EWG agreed that, based on analysis of the new evidence, there were no grounds to change the existing strong recommendation on structured psychological interventions.

The Harms Expert Subcommittee met on the 12 August 2022 and reviewed the 2017 Australian Guideline recommendations in the context of new evidence relating to harms of pharmacological, complementary and physical interventions. The Harms Expert Subcommittee suggested changes to some of the existing recommendations, which were reviewed and accepted without alteration by the EWG at their meeting on 29 August 2022, following consideration of the evidence relating to both benefits and harms of the relevant interventions. These changes are described in Tables 22 to 30.

Recommendations on screening and preventive strategies for birth trauma

The Expert Working Group met on 1 April 2022 and reviewed the findings of a review undertaken to identify and evaluate national and international birth trauma or PTSD clinical practice guidelines to support the development of recommendations on the management and prevention of mental health problems (including PTSD) following birth trauma.

Where existing high-quality guidance was available, the Expert Working Group assessed the suitability of the recommendations within existing guidelines being sensibly applied as recommendations in this updated Guideline, with or without modification. This approach avoided duplicating existing syntheses of the research literature and avoided the need to critically appraise primary research that had already been assessed using reliable processes and tailored to the Australian setting. Australian Guidelines took precedence because they were likely to be the most relevant to Australian clinical practice. If appropriate high-quality Australian birth trauma or PTSD guidelines were not identified as source guidelines, international birth trauma or PTSD guidelines were considered for inclusion.

The deliberations of the EWG are described in Tables 32 and 33.

Consideration of harms and benefits

While recommendations on the use of psychosocial and psychological interventions were based primarily on evidence of effectiveness because they do not cause direct harm to the fetus, infant or child, recommendations on the use of pharmacological, complementary and selected physical interventions were to be based on a trade-off between effectiveness and harm. However, there was very little evidence of effectiveness for these interventions in the perinatal population. The only effectiveness evidence available was for antidepressants (suggesting it may improve postnatal depression) and omega-3 fatty acids (where it appeared to have no effect on depression).

Antidepressants

The review found low confidence evidence for increased risk of postpartum haemorrhage, persistent pulmonary hypertension and depression in the child with SSRI exposure, and moderate confidence evidence for increased risk of autism spectrum disorder, compared with no exposure. There was insufficient evidence on comparisons between agents to make judgements on the direction of effect.

The Harms Expert Subcommittee noted that:

- there is a lack of RCT evidence for ethical reasons but there is evidence from observational studies of benefits of antidepressants (e.g. improved mother-infant interaction) and harms associated with abrupt cessation of treatment due to pregnancy (e.g. suicide, adverse effects on physical activity and nutrition)
- links between exposure and adverse events are unclear and may be attributable to confounding
- the evidence on harms other than postpartum haemorrohage is too uncertain to inform discussion in the Guideline.

Benzodiazepines

The evidence on harms associated with benzodiazepines was of low confidence or uncertain.

Antipsychotics

The review found insufficient evidence for overall estimation of risk for all outcomes. The Harms Expert Subcommittee noted that:

- untreated psychosis is associated with relapse and adverse effects on pregnancy (stillbirth, poor antenatal attendance)
- while there is no specific RCT evidence around efficacy in pregnancy, evidence from the general population supports the use of antipsychotics to treat psychosis based on relapse if untreated and effects of untreated psychosis in pregnant women (e.g. stillbirth, poor antenatal attendance)
- not all antipsychotics are associated with metabolic effects
- clozapine may be a consideration in women who do not respond to other antipsychotics and specialist input would be required.

Anticonvulsants

The review found insufficient evidence for overall estimation of risk for all outcomes. The Harms Expert Subcommittee agreed that:

- the evidence-based recommendation on sodium valproate should refer to pregnant women rather than women of childbearing age and that reference to recommendations on ensuring effective contraception need to be included
- harms associated with anticonvulsants when breastfeeding are variable and this should be reflected in the consensus-based recommendation
- consensus-based recommendations be revised to specify metabolic-inducing antipsychotics and reflect the associated increased risk of gestational diabetes
- the consensus-based recommendation on clozapine use in pregnancy be revised to reflect that it may be used in unique circumstances and specialist input is required.

Lithium

The review found insufficient evidence for overall estimation of risk associated with use of lithium for all outcomes.

Complementary interventions

Of the three identified systematic reviews into omega-3 fatty acids, one found a decreased risk of preterm birth, an increased risk of prolonged pregnancy and no other harms. The other reviews found no harms.

No new evidence was identified on harms associated with St John's Wort or Ginkgo biloba.

Transcranial magnetic stimulation

A single small RCT (n=26) was considered underpowered.

Members agreed to note in the Guideline that there is insufficient evidence to recommend for or against TMS.

Electroconvulsive therapy

No new evidence on harms associated with electroconvulsive therapy was identified.

Links between evidence and recommendations - evidence-to-decision frameworks

The recommendations in the Guideline are derived from those in the 2017 Australian Guideline, some of which were revised in the light of new evidence or to improve clarity. Recommendations from the 2017 Guideline that remain unchanged are not included in this discussion.

Screening and psychosocial assessment

The evidence-to-decision deliberations of the EWG for updated recommendations relating to psychosocial assessment and mental health screening are provided below:

Training for screening and psychosocial assessment

Table 7 GRADE Evidence-to-decision process for considering training for screening and psychosocial assessment (by the EWG)

i	CBR	**2017 recommendation:** All health professionals providing care in the perinatal period should receive training in woman-centred communication skills, psychosocial assessment and culturally safe care. **Revised recommendation:** All health professionals providing care in the perinatal period should receive training in parent-centred communication skills, psychosocial assessment and culturally safe care.
EVIDENCE-TO-DECISION-CRITERIA		
Rationale for changes		The EWG agreed to change the wording of CBR i from 'woman-centred' to 'parent-centred'. This change was made to improve inclusiveness by expanding the recommendation to encompass all parents, not just the birthing parent.

Abbreviations: CBR, consensus-based recommendation; EWG, Expert Working Group; GRADE, Grading of Recommendations, Assessment, Development and Evaluation.

Table 8 Summary of performance of depression screening tools in the antenatal period (2017 systematic review)

TOOL	CONDITION	CUT-OFF	SENSITIVITY	SPECIFICITY	CERTAINTY
Antenatal period					
EPDS	Major depression	≥10	0.88 (0.89 to 0.94)	0.88 (0.86 to 0.90)	High
		≥13	0.83 (0.76 to 0.88)	0.90 (0.88 to 0.92)	
	Minor or major depression	≥10	0.74 (0.65 to 0.82)	0.86 (0.83 to 0.89)	Moderate
		≥13	0.61 (0.5 to 0.72)	0.94 (0.92 to 0.96)	
K10	Major depression	6	0.75 (0.48 to 0.93) to 1.00 (0.88 to 1.00)	0.54 (0.44 to 0.63) to 0.81 (0.74 to 0.86)	Low
PHQ-9	Major depression	9/10	0.74 (0.61 to 0.85) to 0.85 (0.66 to 0.96)	0.73 (0.38 to 0.94) to 0.84 (0.81 to 0.87)	Low
	Minor or major depression	9/10	0.75 (0.64 to 0.84)	0.88 (0.85 to 0.90)	Very low
Whooley questions	Minor or major depression	-	1.00 (0.80 to 1.00)	0.68 (0.58 to 0.77)	Low
Whooley plus 'help' question			0.59 (0.33 to 0.82)	0.91 (0.77 to 0.98)	
Postnatal period					
EPDS	Major depression	≥10	0.95 (0.92 to 0.97)	0.82 (0.80 to 0.84)	High
		≥13	0.80 (0.77 to 0.83)	0.93 (0.92 to 0.94)	
	Minor or major depression	≥10	0.83 (0.81 to 0.86)	0.85 (0.84 to 0.86)	High
		≥13	0.68 (0.66 to 0.71)	0.92 (0.92 to 0.93)	
K10	Minor or major depression	6	0.85 (0.66 to 0.96)	0.41 (0.25 to 0.59)	Low
PHQ-2	Major depression	2 or 3	0.77 (0.46 to 0.95) to 0.84 (0.71 to 0.94)	0.59 (0.53 to 0.66) to 0.79 (0.75 to 0.83)	Low
		3 or 4	0.63 (0.32 to 0.86)	0.79 (0.73 to 0.84)	
PHQ-9	Major depression	simple	0.82 (0.68 to 0.92) to 0.89 (0.80 to 0.95)	0.65 (0.43 to 0.84) to 0.84 (0.80 to 0.87)	Very low
		complex	0.67 (0.51 to 0.80)	0.92 (0.89 to 094)	
Whooley questions	Minor or major depression	-	1.00 (0.81 to 1.00)	0.64 (0.53 to 0.75)	Very low
	Major depression		1.00 (0.92 to 1.00)	0.44 (0.39 to 0.49)	
Whooley plus 'help' question	Minor or major depression	-	0.39 (0.17 to 0.64)	1.00 (0.87 to 1.00)	-

Source: (NICE 2014; updated 2020).

Table 9 Summary of findings related to the use of perinatal depression screening tools (2017 systematic review)

TOOL(S)	TECHNICAL CHARACTERISTICS		NON-TECHNICAL CHARACTERISTICS		CLINICAL USEFULNESS		
	Performance[1]	Certainty[2]	Ease of administration[3]	Language availability[4] & cultural sensitivity[5]	Acceptability[6]	Effectiveness[7]	Implementability[8]
EPDS	Antenatal: Acceptable	●●●● High	High	Multiple languages Multiple populations	High	Good	High
	Postnatal: Acceptable	●●●● High					
PHQ-9	Antenatal: Uncertain	●●○○ Low	High	English Western populations	Unknown but likely to be Good	Unknown	High
	Postnatal: Uncertain	●●○○ Low					
Whooley questions	Antenatal: Uncertain	●●○○ Low	High	English Western populations	Unknown but likely to be Good	Limited	High
	Postnatal: Uncertain	●○○○ Very Low					
K10	Antenatal: Uncertain	●●○○ Low	High	English Western populations	Unknown but likely to be Good	Unknown	High
	Postnatal: Uncertain	●○○○ Very Low					

Footnotes:

1 Performance defined as sensitivity, specificity, positive likelihood ratio, negative likelihood ratio (defined as Acceptable, Limited, or Uncertain).

2 Certainty assessed according to GRADE and QUADAS-2 criteria (defined as High, Moderate, Low or Very Low).

3 Ease of administration was based on judgement regarding the number of items, and the time and complexity of administering and scoring the tool (rated as High, Moderate, or Low).

4 Language availability based on information from the included literature and the awareness of the EWG.

5 Cultural sensitivity was based on information from the included literature of any use in culturally and linguistically diverse populations.

6 Acceptability was based on the overall judgement of the EWG of the acceptability of each tool to women, health care professionals and/or the general public (rated as High, Moderate, Low or Unknown).

7 Effectiveness was defined as positive impact on depressive symptoms, services referred to or utilised, and impact on a woman's mental health (rated as High, Good, Limited, or Unknown).

8 Implementability was based on the overall judgement of the EWG based on available information regarding the training requirements for use of the tool and implications for current models of care and staff and service availability.

Table 10 GRADE Evidence-to-decision process for considering screening for depression (by the EWG)

1	EBR	**2017 recommendation:** Use the EPDS to screen women for a possible depressive disorder in the perinatal period. **Revised recommendation:** Administer the EPDS to screen women for a possible depressive disorder in the perinatal period.	Strong
2	EBR	**2017 recommendation:** Arrange further assessment of perinatal woman with an EPDS score of 13 or more. **Revised recommendation:** Arrange further assessment of perinatal women with an EPDS score of 13 or more.	Strong
iii	CBR	**2017 recommendation:** 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. **Revised recommendation:** For a woman with a positive score on Question 10 on the EPDS undertake or arrange immediate further mental health assessment and, if there is any disclosure of suicidal ideation, take urgent action in accordance with local protocol/policy.	
vi	CBR	**2017 recommendation:** For a woman with an EPDS score between 10 and 12, monitor and repeat the EPDS in 2-4 weeks as her score may increase subsequently. **Revised recommendation:** For a woman with an EPDS score between 10 and 12, monitor and repeat the EPDS in 2-4 weeks as her score may change subsequently. Use clinical judgement in planning monitoring and further care.	

EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms Certainty of evidence Preferences and values, Resources, Equity, Acceptability and Feasibility	The 2017 recommendations were graded as strong based on evidence that: • the EPDS in the antenatal or postnatal period has moderate sensitivity and moderate-to-high specificity for identifying possible depression (moderate to high certainty) and that there is uncertainty about the adequacy of sensitivity or specificity of the PHQ (very low to low certainty), 'Whooley questions (very low quality) or K10 (low quality) • a cut-off score of 13 or more is associated with the highest sensitivity, specificity and positive likelihood ratio and the lowest negative likelihood ratio for detecting possible major depression in the antenatal or postnatal period compared to other cut-off scores (high certainty evidence). The EWG considered the new evidence presented in Section B4 of the Technical Report with regard to the technical performance, non-technical characteristics, and clinical usefulness (acceptability, effectiveness and implementability) of depression screening tools. The EWG acknowledged that the new evidence available for technical performance of depression screening tools was of very low to low certainty and did not have the power to change the strength or direction of the recommendation. The importance of using clinical judgement was highlighted by the EWG, which informed the changes to CBR vi. With the exception of the changes listed in this table, the EWG agreed that no further changes to the 2017 Guideline recommendations for depression screening were justified. When reviewing the evidence, the outcomes that the EWG considered important were the identification of women at greater risk of experiencing mental health issues or struggling with their emotional well-being (noting that outcomes such as reduced risk of postpartum depression at 6 months reflect availability of services rather than outcomes of screening per se). The grading of recommendations for screening as Strong reflects that the EWG is confident that the desirable effects of screening outweigh the undesirable effects. A strong recommendation implies that most people will be best served by being screened (with the underlying assumption that there are further services available). In addition, it was noted that the process of screening is invitational. Screening has broader aims than solely reducing the incidence of depression, with desirable effects in that it provides opportunities for people to be offered additional support and to discuss mental health and may generate data to support ideal service delivery.

Rationale for changes	Grammatical changes were made to EBR 1 and EBR 2: • The EWG felt the word 'administer' was more appropriate to 'use' in the context of EBR 1 • EBR 2 was amended to correct a spelling error (from woman to women) Minor editorial changes to CBR iii were made in reponse to comments received through public consultation. Two changes were made to CBR vi. The word 'increase' was amended to 'change' to acknowledge that EPDS scores may increase or decrease over time. The second sentence was added by the EWG to reinforce the necessity of applying clinical judgement when implementing this recommendation.
Implications for practice	The use of the EPDS in the antenatal and postnatal period was recommended in the previous Perinatal Mental Health Guideline. It is hoped that this recommendation will continue to increase rates of screening, which may have implications for services providing further assessment or treatment in primary care settings, while potentially reducing the severity of disorders (through early identification) and hence need for medical/specialist care. The EPDS is a free tool for use in clinical and research settings, available in multiple languages, and the Guideline developer has incorporated it into digital screening, with permission from the authors.

Abbreviations: CBR, consensus-based recommendation; EBR, evidence-based recommendation; EPDS, Edinburgh Postnatal Depression Scale; EWG, Expert Working Group; GRADE, Grading of Recommendations, Assessment, Development and Evaluation.

Screening for anxiety

Table 11 GRADE Evidence-to-decision process for considering screening for anxiety (by the EWG)

x	**CBR**	**2017 recommendation:** Be aware that anxiety disorder is very common in the perinatal period and should be considered in the broader clinical assessment. **Revised recommendation:** Be aware that anxiety disorders are very common in the perinatal period and should be considered in the broader clinical assessment.
xi	**CBR**	**2017 recommendation:** As part of the clinical assessment, use anxiety items from screening tools (e.g. EPDS items 3, 4 and 5, Depression, Anxiety and Stress Scale (DASS) anxiety items and Kessler Psychological Distress Scale (K10) items 2, 3, 5 and 6) and relevant items in structured psychosocial assessment tools (e.g. Antenatal Risk Questionnaire (ANRQ)). **Revised recommendation:** As part of clinical assessment, use anxiety items from the EPDS or other validated tools that include anxiety items and relevant items in structured psychosocial assessment tools (e.g. ANRQ).
EVIDENCE-TO-DECISION-CRITERIA		
Benefits and harms **Certainty of evidence** **Preferences and values, Resources, Equity, Acceptability and Feasibility**		The EWG considered the new evidence presented in Section B5 of the technical report with regard to the technical performance, non-technical characteristics, and clinical usefulness (acceptability and effectiveness) of anxiety screening tools. It was highlighted that the new evidence available for technical performance of anxiety screening tools was of very low to low certainty. One study of the ANRQ-R *(Austin, 2021)* was identified but was excluded due to the reference standard (SAGE-SR) not meeting the criteria outlined in the PICO. With the exception of the change to CBR xi, the EWG agreed that no further changes to the 2017 Guideline recommendations for anxiety screening were justified.
Rationale for changes		Minor editorial changes to CBR x were made in response to comments received through public consultation. Changes to CBR xi were made to simplify the recommendation, which the EWG acknowledged was more complex than necessary.

Abbreviations: ANRQ-R, Antenatal Risk Questionnaire - Revised; CBR, consensus-based recommendation; EBR, evidence-based recommendation; EPDS, Edinburgh Postnatal Depression Scale; EWG, Expert Working Group; GRADE, Grading of Recommendations, Assessment, Development and Evaluation; PICO, population-intervention-comparator-outcome; SAGE-SR, Series of Assessments for Guiding Evaluation - Self-Report.

Table 12 Summary of findings related to the use of perinatal psychosocial assessment tools

TOOL(S)	TECHNICAL CHARACTERISTICS		NON-TECHNICAL CHARACTERISTICS		CLINICAL USEFULNESS	
	Performance[1]	Certainty[2]	Ease of administration[3]	Language availability[4] & cultural sensitivity[5]	Acceptability[6]	Implementability[7]
ALPHA	Limited	●●●○ Moderate	Moderate	English; Cultural sensitivity unknown	Moderate	Limited
ANRQ	Acceptable	●●●○ Moderate	High	Translated and available digitally in >25 languages (including English) Cultural sensitivity unknown	High	High
PRQ	Acceptable	●●●○ Moderate	Moderate	English; Cultural sensitivity unknown	Unknown	Limited
KMMS	Acceptable	●●●● High	Low	English only; initially developed for Aboriginal women in the Kimberley region in Western Australia. Developed to be culturally specific to Kimberley Indigenous women. Being trialled in other Aboriginal and Torres Strait Islander population groups.	High	Context specific

Footnotes:

1 Performance defined as predictive accuracy, sensitivity, specificity, positive predictive value and/or negative predictive value (defined as Acceptable, Limited, or Unknown).

2 Certainty assessed on the basis of study design and evidence of validity, reliability and applicability (defined as High, Moderate, Low or Very Low).

3 Ease of administration was based on judgement regarding the number of items, and the time and complexity of administering and scoring the tool (rated as High, Moderate, or Low).

4 Language availability based on information from the included literature and the awareness of the EWG.

5 Cultural sensitivity was based on information from the included literature of any use in culturally and linguistically diverse populations.

6 Acceptability was based on the overall judgement of the EWG of the acceptability of each tool to women, health care professionals and/or the general public (rated as High, Moderate, Low or Unknown).

7 Implementability was based on the overall judgement of the EWG based on available information regarding the training requirements for use of the tool and implications for current models of care and staff and service availability.

Table 13 GRADE Evidence-to-decision process for considering the assessment of psychosocial risk (by the EWG)

3	EBR	**2017 recommendation:** If using a tool to assess psychosocial risk, administer the ANRQ. **Revised recommendation:** Administer the ANRQ to assess a woman's psychosocial risk.	Strong
xii	CBR	**2017 recommendation:** Undertake psychosocial assessment in conjunction with a tool that screens for current symptoms of depression/anxiety (i.e. the EPDS). **Revised recommendation:** Undertake psychosocial assessment in conjunction with a tool that screens for current symptoms of depression/anxiety (i.e. the EPDS) as early as possible in pregnancy and 6-12 weeks after the birth.	
xiii	CBR	**2017 recommendation:** Consider language and cultural appropriateness of any tool used to assess psychosocial risk. **Revised recommendation:** Use appropriately translated versions of the ANRQ. Consider language and cultural appropriateness of any tool used to assess psychosocial risk.	
e	PP	**New:** Where possible, seek guidance/support from an Aboriginal and/or Torres Strait Islander worker or professional when conducting psychosocial assessment on an Aboriginal and/or Torres Strait Islander woman.	

EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms Certainty of evidence Preferences and values, Resources, Equity, Acceptability and Feasibility	The 2017 recommendation was graded as strong based on evidence that the ANRQ has acceptable technical performance in identifying women at increased risk of depression or anxiety disorder (OR 6.3 [95% CI 3.5 to 11.5]), is acceptable among pregnant women (92-97%) and midwives (98%) and has a positive effect on the rates of referral for mental health assessment (moderate certainty evidence). In contrast, the ALPHA has limited psychometric properties, is moderately acceptable to users and is effective in identifying family violence (OR 2.7; 95%CI 1.1 to 6.9) and 'high level of psychosocial concern' on the health professional's part (OR 2.8; 95%CI 0.7 to 11.7) but does not have adequate capacity to identify women at increased risk of postnatal depression (moderate certainty evidence). The EWG considered the new evidence presented in Section B3 of the Technical Report with regard to the technical performance, non-technical characteristics, and clinical usefulness (acceptability and implementability) of psychosocial assessment tools. EWG members with a conflict of interest (such as authorship of an included study) were required to exit the videoconference during the discussions and voting. The EWG extensively discussed the reference standard criteria as defined in the PICO. This was specifically discussed in relation to a new study by Reilly (2022) evaluating the ANRQ-R, using SAGE-SR as a reference standard. It was noted that the requirement for a clinical/diagnostic interview to be used as a reference standard may result in larger, appropriately powered studies being excluded due to the practical limitations of conducting clinical/diagnostic interviews with a large sample size. Nevertheless, the EWG agreed that the study by Reilly (2022) should be excluded from the Evidence Review Update as the SAGE-SR did not meet the pre-specified PICO criteria for the reference standard. The EWG agreed that this important emerging evidence on the ANRQ-R would be noted in the Guideline narrative. The EWG reviewed new evidence on the Kimberley Mum's Mood Scale (KMMS), the acceptability and feasibility of web-based mental health screening (compared with paper-based screening), and the acceptability of the ANRQ and EPDS as part of routine psychosocial assessment. The EWG agreed that references to this evidence would be included in the Guideline narrative but did not specifically result in edits to existing recommendations from the 2017 Australian Guideline. The availability of language translations of the ANRQ was discussed by the EWG.

Rationale for changes	The EWG agreed to change EBR 3 from 'If using a tool to assess psychosocial risk, administer the ANRQ' to 'Administer the ANRQ to assess a woman's psychosocial risk.' This change is consistent with the current psychosocial assessment program implemented in the Australian context. The change also aligns with cumulative moderate quality evidence that the ANRQ has acceptable technical performance, that it is easy to administer in practice, that it has high acceptability among pregnant women and midwives, and that it has a positive impact on the rates of referral for further mental health assessment. Changes to CBR xii were made in response to comments received through public consultation. The EWG agreed to change CBR xiii to include the additional wording 'Use appropriately translated versions of the ANRQ'. This change was made to align with changes to EBR 3, and in the context of increased availability of translated versions of the ANRQ since the 2017 Australian Guidelines were published. The addition of wording to recommend using an appropriately translated questionnaire is consistent with the findings of Nithianandan (2016), who identified the use of translated EPDS versions (for mental health screening) as an important environmental factor affecting the implementation of perinatal mental health screening in women of refugee background in Australia. Practice point e was added in response to comments received through public consultation.
Implications for practice	The ANRQ is a free tool for use in clinical and research settings and the Guideline developer has incorporated it into digital screening, with permission of the authors. The ANRQ has also been translatated into multiple languages for use in the digital screening.

Abbreviations: ANRQ, Antenatal Risk Questionnaire; ANRQ-R, Antenatal Risk Questionnaire - Revised; CBR, consensus-based recommendation; EBR, evidence-based recommendation; EPDS, Edinburgh Postnatal Depression Scale; EWG, Expert Working Group; GRADE, Grading of Recommendations, Assessment, Development and Evaluation; PICO, population-intervention-comparator-outcome; SAGE-SR, Series of Assessments for Guiding Evaluation - Self-Report.

Assessing perinatal mental health in non-birthing partners

In addition to the systematic recent evidence on screening, prevention and treatment of mental health among women in the perinatal period, a separate review appraised the evidence on assessing perinatal mental health among fathers and non-birthing partners. A mixed-methods approach was used for the assessment of psychosocial assessment and screening tools for the detection of mental health problems. The approach included the use of systematic reviews of quantitative evidence (e.g., screening test performance), descriptions of non-technical characteristics of the tests (e.g., time to administer, complexity of scoring), and narrative reviews of acceptability, effectiveness and implementation issues associated with perinatal mental health assessment in non-birthing partners. A set of draft consensus-based recommendations was developed by the Fathers and Partners Expert Advisory Committee (FPEAC). These were subsequently revised for consistency with the approach used in the Guideline and reviewed and agreed by the EWG.

Mental health screening of fathers and partners

Table 14 GRADE Evidence-to-decision process for considering mental health screening in non-birthing partners (by the FPEAC)

GRADE CATEGORY	
Benefits and harms	It is expected that screening for mental health problems will provide benefits in that potential issues that may equire additional support will be highlighted. Screening should be undertaken within the context of having training and referral pathways in place.
Certainty of evidence	A limited body of evidence was identified on the use of the mental health screening tools of interest to the FPEAC in fathers and non-birthing partners. All studies reporting diagnostic test accuracy included male partners only; no evidence was identified on the performance or acceptability of mental health screening tools in co-mothers, step-parents or other partners including non-binary parents. Although a small number of studies were identified suggesting the accuracy and acceptability of mental health screening tools in fathers in the postnatal period, overall there is insufficient published evidence to support whether any one specific tool (on a universal basis or targeted to high-risk groups) would be accurate, acceptable or effective at identifying mental health problems or improving outcomes. There was no evidence regarding screening tools for fathers/partners in the antenatal period. All studies that assessed diagnostic performance of mental health screening tools in the target population reported on the EPDS, which is likely a reflection of the wide use of this tool in perinatal clinical and research settings rather than it being the most appropriate tool for use in fathers and non-birthing partners. The included studies (7 in total) were all of low or very low quality and only one study, published in 2001, was conducted in Australia. Across the studies there was no consensus on the appropriate EPDS cut-off for screening fathers for mental health problems.
Preferences and values, Resources	We have no systematically collected information regarding patients' preferences and values, or resources egarding mental health screening of fathers and non-birthing partners in the perinatal period. No concerns were raised regarding preferences and values or resources by the FPEAC during deliberations.
Equity	We have no systematically collected evidence regarding impact on equity of mental health screening of fathers and non-birthing partners in the perinatal period. Further research is needed in a range of practice settings and with a range of stakeholders, including minority groups (minority ethnic parents, non-resident parents, step-parents, LGBTQI+ parents). The literature to date is largely focused on postnatal depression but anxiety and distress will also be important to address in the perinatal period.

Acceptability	Implementation of mental health assessment for fathers and non-birthing partners into clinical practice depends on acceptability to both health professionals and parents. The Darwin review (the foundation review) noted that evidence regarding the acceptability of specific measures is limited but resonated with literature on acceptability in women, with timing of administration, time required to complete the assessment and clarity of wording being important considerations. However, there are also fundamental challenges to overcome if effective mental health screening is to be implemented in fathers and non-birthing parents. Further research is required to determine acceptability. Acceptability among health professionals is likely to be dependent on the availability of systems to support screening in fathers and partners. This is currently lacking in traditional maternity settings where the birthing mother/person is the registered client/patient.
Feasibility	The timing of screening using the EPDS was postnatal in all except two studies, which presented pooled data for antenatal and postnatal timepoints. The accuracy of screening fathers during pregnancy therefore remains unknown. There were a number of mental health screening tools that were considered however were deemed inappropriate due to their length and the time required for administration, additional training requirements and implementability across different settings.
Rationale	In formulating the recommendation, the FPEAC considered the context of mental health screening, existing training in mental health assessment tools, the timing of implementation and the need for training and support structures to support mental health screening.

NO.	CONSENSUS-BASED RECOMMENDATIONS
Draft (developed by FPEAC)	Fathers and partners should be offered mental health screening in the perinatal period.
xiv	Offer non-birthing parents mental health screening in the perinatal period.
Draft (developed by FPEAC)	Given the absence of support for one specific screening tool it is not currently possible to universally recommend one screening tool over another.
xv	Given the absence of support for one specific screening tool it is not currently possible to universally recommend one screening tool over another.
Draft (developed by FPEAC)	Selection of screening tools should be in accordance with availability and competencies of clinicians to use a specific tool within specific settings.
xvi	Select screening tools in accordance with availability and competencies of health professionals to use a specific tool within specific settings.
Draft (developed by FPEAC)	The EPDS (with a lower cut-off score) and the K10 should be considered due to the brevity of these tools and their current use in maternity and postnatal settings (EPDS), and in primary care settings (K10) in the Australian context.
xvii	Consider use of the EPDS (with a lower cut-off score) and the K10 due to the brevity of these tools and their current use in maternity and postnatal settings (EPDS), and in primary care settings (K10) in the Australian context.
Draft (developed by FPEAC)	If using the EPDS, a lower cut-off score (ten or more) is recommended for men compared to women, noting responses to individual items.
xviii	When administering the EPDS to male parents, use a lower cut-off score (10 or more), noting responses to individual items.
Draft (developed by FPEAC)	The timing of mental health screening should be as early as practicable in pregnancy and from three to six months following the birth for fathers and partners. Repeat screening should be offered when clinically indicated.
xix	Offer non-birthing parents mental health screening as early as practicable in pregnancy and from 3-6 months after the birth. Offer repeat screening when clinically indicated.

Psychosocial assessment of fathers and partners

Table 15 GRADE Evidence-to-decision process for considering the assessment of psychosocial risk among fathers and partners (by the FPEAC)

GRADE CATEGORY	
Benefits and harms	No evidence-based conclusions can be drawn on the benefits and harms of using tools for perinatal psychosocial assessment of fathers and non-birthing partners. It is expected that screening for psychosocial risk factors (if supported by the setting) will provide benefits in that potential issues that may require additional support will be highlighted. The potential harms of screening are that it should not take place if there is no skilled workforce and there are no services available to assist should issues be identified.
Certainty of evidence	No evidence-based conclusions can be drawn on the most appropriate tools for perinatal psychosocial assessment of fathers and non-birthing partners due to the absence of specific tools developed. Overall, the existing evidence regarding the most appropriate methods for psychosocial assessment of (a) fathers or (b) non-birthing partners at risk of mental health problems in the perinatal period is insufficient and more research is needed.
Preferences and values, Resources, Equity	We have no systematically collected information regarding patients' preferences and values, resources or equity. Use of psychosocial assessment is expected to be affordable with no negative impact expected.
Acceptability	No studies were identified in the literature search that specifically reported on acceptability of psychosocial assessment tools in fathers or non-birthing partners in the perinatal period... Although the ANRQ appears to be attractive in terms of ease of administration and implementability, the language and domains covered in the tool may not be appropriate for fathers in its current form.
Feasibility	The use of psychosocial screening is likely to be feasible if there is extension of service infrastructure to support screening for fathers and partners. Although it is already widely used for mothers in the maternal child health setting, the mode/setting of delivery may be an important consideration as mothers tend to be in contact with health services throughout the perinatal period, whereas fathers and partners have sporadic contact.
Rationale	In formulating the recommendation, the FPEAC considered the suitability and need for adaption of existing psychosocial assessment tools, the timing of implementation and the need for training and support structures to support psychosocial assessment.

NO.	CONSENSUS-BASED RECOMMENDATIONS
Draft (developed by FPEAC)	Fathers and partners should be offered psychosocial screening in the perinatal period.
xx	Offer non-birthing parents psychosocial screening in the perinatal period.
Draft (developed by FPEAC)	Fathers and partners identifying as male should be offered screening using the amended ANRQ/PNRQ screening tool.
xxi	Use the amended ANRQ/PNRQ screening tool for male non-birthing parents.
Draft (developed by FPEAC)	The ANRQ/PNRQ in its current form can be used for psychosocial screening of female non-birthing parents.
xxii	Use the ANRQ/PNRQ in its current form for psychosocial screening of non-birthing mothers.

Draft (developed by FPEAC)	For those not identifying as male or female, the existing version (for mothers) should be offered to the birthing parent, and the revised male version for non-birthing parent.
xxiii	For parents who do not identify as male or female, offer the ANRQ/PNRQ in its current form to the birthing parent, and the amended version to the non-birthing parent.
Draft (developed by FPEAC)	The timing of psychosocial assessment should be as early as practicable in pregnancy and the postnatal period (in combination with mental health screening).
xxiv	Offer psychosocial assessment as early as practicable in pregnancy and the postnatal period (in combination with mental health screening).

Assessing mother-infant interaction and the safety of the woman and infant and general principles in prevention and treatment

The EWG reviewed the recommendations from the 2017 Australian Guideline on assessing mother-infant interaction, assessing risk of suicide, supporting emotional health and well-being, general principles in prevention and treatment, general principles in the use of pharmacological treatments and postnatal care and support.

Assessing mother-infant interaction and safety of the infant

Table 16 Changes to practice point on women identified as at risk of suicide

j	**PP**	**2017 wording:** When a woman is identified as at risk of suicide, manage immediate risk, arrange for urgent mental health assessment and consider support and treatment options. ***(in response to comments received through public consultation)*** **Revised wording:** When a woman is identified as at risk of suicide, manage immediate risk, arrange for urgent mental health assessment and consider support and treatment options, including ensuring safety/appropriate care for the baby.

Supporting emotional health and well-being

Table 17 Changes to practice point on healthy behaviours

l	**PP**	**2017 wording:** Provide parents in the perinatal period with advice on lilfestyle issues and sleep, as well as assistance in planning how this advice can be incorporated into their daily activities during this time. ***(in response to comments received through public consultation)*** **Revised wording:** Provide parents in the perinatal period with support for integrating healthy behaviours in their daily lives, and where appropriate referral to evidence-based physical activity, healthy eating and/or sleep programs.

Providing information and advice

Table 18 Changes to practice point on involving significant others

n	**PP**	**2017 wording:** If a woman agrees, provide information to and involve her significant other(s) in discussions about her emotional well-being and care throughout the perinatal period. ***(in response to comments received through public consultation)*** **Revised wording:** If a woman gives informed consent, provide information to and involve her significant other(s) in discussions about her emotional well-being and care throughout the perinatal period.

Planning care for women with mental health conditions

Table 19 Changes to practice point on planning care for women with mental health conditons

o	PP	**2017 wording:** Provide advice about the risk of relapse during pregnancy and especially in the early postpartum period to women who have a new, existing or past mental health condition and are planning a pregnancy. ***(on advice from Prof Marie-Paule Austin)*** **Revised wording:** Provide advice about the risk of relapse during pregnancy and especially in the first few postpartum months to women who have a new, existing or past mental health condition and are planning a pregnancy.

Use of pharmacological treatments

Table 20 Changes to practice points on use of pharmacological treatments

t	PP	**2017 wording:** Ensure that women are aware of the risks of relapse associated with stopping medication and that, if a medication is ceased, this needs to be done gradually and with advice from the treating clinician. ***(on advice from Dr Tamara Cavenett)*** **Revised wording:** Ensure that women are aware of the risks of relapse associated with stopping or changing medication and that, if a medication is ceased, this needs to be done gradually and with advice from the treating health professional.
v	PP	**2017 wording:** Ideally, treatment with psychoactive medications during pregnancy would involve close liaison between a treating psychiatrist or where appropriate the woman's GP and her maternity care provider(s). In more complex cases, it is advisable to seek a second opinion from a perinatal psychiatrist. ***(in response to comments received through public consultation)*** **Revised wording:** Ideally, treatment with psychoactive medications during pregnancy would involve close liaison between the prescribing health professional and a woman's maternity care provider(s). In more complex cases, it is advisable to seek a second opinion from a perinatal psychiatrist.

Postnatal care and support

The EWG agreed with the deliberations of the Harms Expert Subcommittee detailed in the table below and therefore the following table represents the decisions of both the Harms Expert Subcommittee and the EWG.

Table 21 GRADE Evidence-to-decision process for postnatal care and support (by the EWG)

xxvii	CBR	**2017 recommendation:** If a mother with a severe postnatal episode requires hospital admission, avoid separation from her infant with co-admission to a specialist mother-baby unit where facilities are available and appropriate. **Revised recommendation:** Where possible, if a mother with a severe postnatal episode requires hospital admission, avoid separation from her infant with co-admission to a specialist mother-baby unit where facilities are available and appropriate.
EVIDENCE-TO-DECISION-CRITERIA		
Benefits and harms **Certainty of evidence** **Preferences and values, Resources, Equity, Acceptability and Feasibility**		In amending this recommendation to include the wording 'where possible', the EWG acknowledged that it will not always be possible to implement this recommendation, and factors such as preferences, resources, acceptability and feasibility may impact on this decision.
Rationale for recommendation		The EWG agreed to change EBR 3 from 'If using a tool to assess psychosocial risk, administer the ANRQ' to 'The EWG agreed to the addition of the wording 'where possible' at the beginning of this CBR to acknowledge that implementing this recommendation will not be possible in all scenarios.

Abbreviations: CBR, consensus-based recommendation; EBR, evidence-based recommendation; EWG, Expert Working Group; GRADE, Grading of Recommendations, Assessment, Development and Evaluation.

Treatment and prevention interventions for depression and anxiety in the perinatal period

The following section describes the evidence-to-decision deliberations of the EWG and the Harms Expert Subcommittee in relation to treatment and prevention interventions for anxiety and depression in the perinatal period.

Psychosocial and psychological interventions

The EWG met on the 29 August 2022 and reviewed the 2017 Australian Guideline recommendations in the context of new evidence relating to the effectiveness of interventions for anxiety and depression in the perinatal period. For treatment interventions, the only evidence identified as suitable for full GRADE appraisal from the Evidence Review Update were in the categories of structured psychological interventions (8 RCTs on CBT, none on IPT) and online interventions (4 RCTs). There were no RCTs suitable to proceed to full GRADE appraisal for preventive interventions.

No new evidence relevant to structured psychoeducation or social support was identified. The heterogeneity of the studies of structured psychological interventions was discussed at the EWG meeting, as was the resulting inability to perform a meta-analysis of the studies. Based on analysis of the new evidence, the EWG agreed that there are no grounds to change the existing strong recommendation (EBR 6) for structured psychological interventions and agreed that the existing wording of the recommendation remains appropriate.

The EWG noted the importance of online interventions in the current Australian context, with increasing demand for and access to online interventions since the COVID-19 pandemic. The heterogeneity of the evidence for online interventions, and therefore unsuitability for meta-analysis was discussed. Following review of the evidence for online interventions, the EWG agreed that an evidence-based recommendation could not be made, however noted that reference to online interventions in the Guideline was necessary, and consideration would be made to including a new practice point or consensus-based recommendation on online interventions.

Table 22 Recommendations on psychosocial and psychological interventions - implications for practice

4	EBR	**No change:** Provide structured psychoeducation to women with symptoms of depression in the perinatal period.	Strong
Implications for practice		The provision of structured psychoeducation was recommended in the previous version of the Guideline. The need for quality psychoeducational material for pregnant women, new mothers and their families available across maternity and healthcare settings remains. This has previously taken the form of education booklets and electronic information for consumers and family members, and more recently this has involved the development of the Ready to COPE App to delivery timely, relevant information throughout the perinatal period. The provision of such psychoeducation resources needs to be sustained, taking into account the needs of women from non-English speaking backgrounds.	
5	EBR	**No change:** Advise women with symptoms of depression in the postnatal period of the potential benefits of a social support group.	Conditional
Implications for practice		Social support groups were recommended in the previous version of the Guideline. As these groups can play an important role in the prevention and/or adjunct to interventions, the need for continued provision of support groups (e.g. mothers' group) and the promotion of other quality support networks within community settings remains.	
6	EBR	**2017 wording:** Recommend individual structured psychological interventions (cognitive behavioural therapy or interpersonal psychotherapy) to women with mild-to-moderate depression in the perinatal period. **Revised wording:** Recommend individual structured psychological interventions (cognitive behavioural therapy or interpersonal psychotherapy) to women with symptoms of depression in the perinatal period.	Strong
Implications for practice		Individual structured psychological interventions were recommended in the previous version of the Guideline. Continued provision of these interventions requires clear referral pathways for health professionals to refer women to suitably qualified health professionals and/or online treatments for the provision of timely recommended psychological treatments; and continued Medicare rebatable item numbers to ensure the continued provision of psychological services to women within the perinatal period.	
Rationale for changes		Submissions received through the public consultation process raised concerns about a lack of definition for 'mild-to-moderate' and the perception that women with more severe symptoms would not be offered psychological interventions. The evidence supporting the recommendation refers to 'women with symptoms or a diagnosis of depression' *(NICE 2014; updated 2020)*. The recommendation has been revised to reflect this evidence base and address submission concerns regarding: • definitions of mild, moderate and severe depression • the recommendation appearing to preclude psychological interventions for women with more severe depression • the need to include women's preferences.	

7	EBR	**No change:** Advise women with depression or anxiety disorder in the postnatal period of the possible benefits of directive counselling.	Conditional
Implications for practice		Directive counselling was recommended in the previous version of the Guideline. Continued provision of this intervention requires clear referral pathways for health professionals to refer women to suitably qualified health professionals and/or online treatments for the provision of timely recommended psychological treatments; and continued Medicare rebatable item numbers to ensure the continued provision of psychological services to women within the perinatal period.	

Complementary therapies for depressive and anxiety disorders

The EWG agreed with the deliberations of the Harms Expert Subcommittee detailed in the table below and therefore the following table represents the decisions of both the Harms Expert Subcommittee and the EWG.

Table 23 GRADE Evidence-to-decision process for considering the harms from complementary therapies (by the Harms Expert Subcommittee)

8	EBR	**No change:** Advise women that omega-3 fatty acid supplementation does not appear to improve depression symptoms but is not harmful to the fetus or infant when taken during pregnancy or while breastfeeding.	Conditional
xxx	CBR	**No change:** Advise pregnant women that the evidence on potential harms to the fetus from St John's Wort is limited and uncertain and that use of this treatment during pregnancy is not recommended.	
xxxi	CBR	**2017 recommendation:** Advise pregnant women that potential harms to the fetus from Gingko biloba have not been researched, and that use of this treatment during pregnancy is not recommended. ***(spelling correction)*** **Revised recommendation:** Advise pregnant women that potential harms to the fetus from Ginkgo biloba have not been researched, and that use of this treatment during pregnancy is not recommended.	

EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms	The Harms Expert Subcommittee considered the information presented in Technical Report Part D for complementary therapies. Of the three identified reviews into omega-3 fatty acids, the Middleton Cochrane review (2018) found a decreased risk of preterm birth, an increased risk of prolonged pregnancy and no other harms. Middleton 2018 concluded that omega-3 supplementation during pregnancy is effective at reducing incidence of preterm birth, but probably increases the incidence of post-term pregnancies. No harms of omega-3 supplementation were reported in the other reviews *(Nevins et al. 2021 and Firouzabadi et al. 2022)*. No new evidence was identified on harms associated with St John's Wort or Ginkgo biloba.
Certainty of evidence	The Harms Expert Subcommittee considered the information presented in Technical Report Part D for complementary therapies. Of the three identified reviews into omega-3 fatty acids, using AMSTAR 2, the overall confidence in the results of the reviews was high for Middleton 2018, moderate for Nevins 2021 and low for Firouzabadi 2022. No new evidence was identified on harms associated with St John's Wort or Ginkgo biloba.

Preferences and values, Resources, Equity, Acceptability and Feasibility	We did not systematically collect evidence regarding patients' preferences and values, resources, equity, acceptability, and feasibility of using complementary therapies by pregnant or postnatal women, or women who are breastfeeding. No concerns were raised regarding preferences and values, resources, equity, acceptability and feasibility by the Harms Expert Subcommittee.
Rationale for recommendation	The Harms Expert Subcommittee members agreed that the current wording of the recommendations is appropriate (other than an edit to the spelling of ginkgo biloba in Consensus Based Recommendation xxxi).
Implications for practice	This recommendation is unchanged since the previous version of the Guideline. It supports the need for quality information provision to women and families about the role of omega-3 fatty acid supplementation as part of psychoeducation (outlined above).

Abbreviations: AMSTAR, A Measurement Tool to Assess systematic Reviews; CBR, consensus-based recommendation; EBR, evidence-based recommendation; GRADE, Grading of Recommendations, Assessment, Development and Evaluation.

Pharmacological treatments for depressive and anxiety disorders

The EWG agreed with the deliberations of the Harms Expert Subcommittee detailed in the tables below and therefore the following tables represent the decisions of both the Harms Expert Subcommittee and the EWG.

Table 24 GRADE Evidence-to-decision process for considering the harms from antidepressants (by the Harms Expert Subcommittee)

aa	**PP**	**New:** Be aware that failure to use medication where indicated for moderate-to-severe depression and/or anxiety in pregnancy or postnatally may affect mother-infant interaction, parenting, maternal health and well-being and infant outcomes.	
9	**EBR**	**2017 wording:** Consider the use of selective serotonin reuptake inhibitors (SSRIs) as first-line treatment for moderate-to-severe depression and/or anxiety in pregnant women. **Revised wording:** When prescribing antidepressants to pregnant women, consider SSRIs as first-line pharmacological treatment for depression and/or anxiety.	Conditional
bb	**PP**	**2017 wording:** Before choosing a particular SSRI for pregnant women, consider the woman's past response to SSRI treatment, obstetric history (e.g., other risk factors for miscarriage or preterm birth) and any factors that may increase risk of adverse effects. **Revised wording:** Before choosing a particular antidepressant for pregnant women, consider the woman's past response to antidepressant treatment, obstetric history (e.g., other risk factors for miscarriage, preterm birth or postpartum haemorrhage) and any factors that may increase risk of adverse effects.	
10	**EBR**	**2017 wording:** Use SSRIs as first-line treatment for moderate-to-severe depression in postnatal women. **Revised wording:** When prescribing antidepressants to women in the postnatal period, use SSRIs as first-line pharmacological treatment for depression.	Strong
cc	**PP**	**2017 wording:** Before prescribing SSRIs to women who are breastfeeding, consider the infant's health and gestational age at birth. **Revised wording:** Before prescribing antidepressants to women who are breastfeeding, consider the infant's health and gestational age at birth.	

EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms	The grading of the 2017 recommendation on SSRIs in the postnatal period was based on high quality RCT evidence of efficacy in the general population; while there are few data on the efficacy of antidepressants in perinatal samples, the available evidence suggests that SSRI use may improve response and remission rate at 6-8 weeks. Although the perinatal-specific evidence is of very low quality, this recommendation was graded as 'strong' due to the minute exposure to these antidepressants through breast milk and the greater need to treat depression postnatally (given its effect on the woman's ability to care for the infant and on mother-infant attachment). The Harms Expert Subcommittee considered the information presented in Technical Report Part D for antidepressants. They specifically noted that there is a lack of RCT evidence of benefits of antidepressants (for ethical reasons) but there is evidence from observational studies (e.g., improved mother-infant interaction), and evidence of harms associated with abrupt cessation of treatment due to pregnancy (e.g., suicide, and adverse effects on physical activity and nutrition). The Harms Expert Subcommittee agreed that the potential harms of the failure to use medication where indicated for moderate-to-severe depression and/or anxiety in pregnancy or postnatally may affect mother-infant interaction, parenting, maternal health and well-being, and infant outcomes.
Certainty of evidence	The Harms Expert Subcommittee found that overall confounding was an issue across the studies included in the AHRQ review[12] because primary studies looking at harms of exposure to pharmacological agents during pregnancy are most likely to be observational studies (case-control studies, pregnancy registry studies, observational cohort studies, and secondary analyses of administrative databases). The AHRQ review[13] found low confidence evidence for increased risk of postpartum haemorrhage, persistent pulmonary hypertension, and depression in the child with SSRI exposure, and moderate confidence evidence for increased risk of autism spectrum disorder (ASD), compared with no exposure. The Harms Expert Subcommittee noted serious issues regarding residual confounding around risk of ASD and depression in the child. There was insufficient evidence on comparisons between agents to make judgements on the direction of effect. The Harms Expert Subcommittee members noted that links between exposure and harms are unclear and may be attributable to confounding.
Preferences and values, Resources, Equity, Acceptability and Feasibility	We did not systematically collect evidence regarding patients' preferences and values, resources, equity, acceptability, and feasibility of using antidepressants in pregnant or postnatal women, or those who are breastfeeding. The Harms Expert Subcommittee did not raise any concerns regarding patients' preferences and values, resources, equity, acceptability, and feasibility of using antidepressants to treat depression or anxiety in women who are pregnant, postnatal or breastfeeding.
Rationale for recommendation/s	In formulating and editing the recommendations on antidepressants in pregnancy, the postnatal period, and in women who are breastfeeding, the Harms Expert Subcommittee acknowledged: • There is a lack of RCT evidence for ethical reasons but there is evidence from observational studies of benefits of antidepressants (e.g. improved mother-infant interaction) and harms associated with abrupt cessation of treatment due to pregnancy (e.g. suicide, and adverse effects on physical activity and nutrition) • Links between exposure and adverse events are unclear and may be attributable to confounding • A practice point on the harms of failing to treat moderate-to-severe depression and/or anxiety should be included • The risk of postpartum haemorrhage should be included in practice point aa • Consensus-based recommendations and practice points should refer to antidepressants generally rather than SSRIs specifically • The new evidence on harms other than postpartum haemorrhage is too uncertain to be included in the Guideline.

[12, 13] Viswanathan, M.,Middleton, J. C.,Stuebe, A. M.,Berkman, N. D.,Goulding, A. N.,McLaurin-Jiang, S.,Dotson, A. B.,Coker-Schwimmer, M.,Baker, C.,Voisin, C. E.,Bann, C.,Gaynes, B. N. (2021). Maternal, Fetal, and Child Outcomes of Mental Health Treatments in Women: A Meta-Analysis of Pharmacotherapy. Psychiatric Research and Clinical Practice, 3(3), 123-140.

Rationale for changes to EBRs 9 and 10 following public consultation	Concerns raised through the public consultation process included: • the use of the classifications of symptoms as mild, moderate or severe, without these being defined • the perception that treatment would be based on classification of symptoms (i.e. women with mild symptoms would only be offered psychological treatment and women with moderate-to-severe symptoms would only be offered pharmacological treatment) • the need for treatment decisions to reflect women's preferences. The inclusion of 'moderate-to-severe' in the recommendations was based on consensus not evidence, so has been taken out. First-line treatment has been qualified as first-line pharmacological treatment to remove the perception that psychological treatment is not a consideration. An additional clause has been added to the beginning of the recommendation to acknowledge that an agreement between treating health professional and woman is needed before a treatment decision is made.
Implications for practice	The intent of these recommendations is unchanged since the previous version of the Guideline. They support the need for quality information provision to women and families about the safe and effective use of SSRIs in the perinatal period.

Abbreviations: AHRQ, Agency for Healthcare Research and Quality; CBR, consensus-based recommendation; EBR, evidence-based recommendation; GRADE, Grading of Recommendations, Assessment, Development and Evaluation; RCT, randomized controlled trial; SSRI, selective serotonin reuptake inhibitor.

Table 25 GRADE Evidence-to-decision process for considering the harms from benzodiazepines or z-drugs (by the Harms Expert Subcommittee)

xxxii	**CBR**	**2017 recommendation:** Consider the short-term use of benzodiazepines for treating moderate to severe symptoms of anxiety while awaiting onset of action of an SSRI or tricyclic antidepressant (TCA) in pregnant or postnatal women. **Revised recommendation:** Consider the short-term use of benzodiazepines for treating moderate-to-severe symptoms of anxiety while awaiting onset of action of an antidepressant in pregnant or postnatal women.
ff	**PP**	***(in response to comments received through public consultation)*** **New:** Use caution in prescribing benzodiazepines in the perinatal period due to the risk of dependence, withdrawal in the neonate and sedation with breastfeeding.
EVIDENCE-TO-DECISION-CRITERIA		
Benefits and harms	The Harms Expert Subcommittee considered the information presented in Technical Report Part D. The sub-committee agreed that the potential harms of the failure to use medication where indicated for moderate-to-severe depression and/or anxiety in pregnancy or postnatally, or those who are breastfeeding may affect mother-infant interaction, parenting, maternal health and well-being, and infant outcomes.	
Certainty of evidence	The Harms Expert Subcommittee found that overall confounding was an issue across the studies included in the AHRQ review[14] as primary studies looking at harms of exposure to pharmacological agents during pregnancy are most likely to be observational studies (case-control studies, pregnancy registry studies, observational cohort studies, and secondary analyses of administrative databases). The AHRQ review[15] found the evidence on benzodiazepines was of low confidence or uncertain compared with no exposure. The AHRQ review found no eligible studies of the harms of benzodiazepines or z-drugs versus an active comparator.	

[14, 15] Viswanathan, M.,Middleton, J. C.,Stuebe, A. M.,Berkman, N. D.,Goulding, A. N.,McLaurin-Jiang, S.,Dotson, A. B.,Coker-Schwimmer, M.,Baker, C.,Voisin, C. E.,Bann, C.,Gaynes, B. N. (2021). Maternal, Fetal, and Child Outcomes of Mental Health Treatments in Women: A Meta-Analysis of Pharmacotherapy. Psychiatric Research and Clinical Practice, 3(3), 123-140.

Preferences and values, Resources, Equity, Acceptability and Feasibility	We did not systematically collect evidence regarding patients' preferences and values, resources, equity, acceptability, and feasibility of using benzodiazepines or z-drugs in pregnant or postnatal women, or those who are breastfeeding. The Harms Expert Subcommittee did not raise any concerns regarding patients' preferences and values, resources, equity, acceptability, and feasibility of using benzodiazepines or z-drugs in pregnant or postnatal women, or those who are breastfeeding.
Rationale for recommendation/s	The Harms Expert Subcommittee members agreed that the current wording of the practice points is appropriate, and no changes were suggested to practice points cc, dd or ee. The Harms Expert Subcommittee members noted that consensus-based recommendation xxxii should refer to antidepressants generally rather than SSRIs specifically.

Abbreviations: AHRQ, Agency for Healthcare Research and Quality; CBR, consensus-based recommendation; EBR, evidence-based recommendation; GRADE, Grading of Recommendations, Assessment, Development and Evaluation; SSRI, selective serotonin reuptake inhibitor.

Pharmacological treatments for severe mental illness

The EWG agreed with the deliberations of the Harms Expert Subcommittee detailed in the tables below and therefore the following tables represent the decisions of both the Harms Expert Subcommittee and the EWG.

Table 26 GRADE Evidence-to-decision process for considering the harms from antipsychotic medications (by the Harms Expert Subcommittee)

11	**EBR**	**2017 recommendation:** Consider the use of antipsychotics for treating psychotic symptoms in pregnant women. **Revised recommendation:** Use antipsychotics to treat psychotic symptoms in pregnant women.	Conditional
xxxiv	**CBR**	**2017 recommendation:** Use caution when prescribing any antipsychotic to pregnant women, particularly for women with a propensity for weight gain and metabolic syndrome. **Revised recommendation:** Use caution when prescribing metabolic-inducing antipsychotics to pregnant women, due to the increased risk of gestational diabetes.	
xxxv	**CBR**	**2017 recommendation:** If women commence or continue antipsychotic treatment during pregnancy, monitor them for excessive weight gain and the development of gestational diabetes and refer them for advice on weight management as required. **Revised recommendation:** If women commence or continue metabolic-inducing antipsychotic treatment during pregnancy, consider earlier screening and monitoring for gestational diabetes.	
xxxvi	**CBR**	**2017 recommendation:** Do not initiate use of clozapine in pregnant women. **Revised recommendation:** If considering use of clozapine in pregnant women, seek specialist psychiatric consultation.	

EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms	The Harms Expert Subcommittee considered the information presented in Technical Report Part D for antipsychotic medications. The AHRQ review[16] found insufficient evidence of the harms of antipsychotic use by pregnant or postnatal women, or women who are breastfeeding when compared to no exposure. The Harms Expert Subcommittee members noted that: • Untreated psychosis is associated with relapse and adverse effects on pregnancy (e.g., stillbirth, poor antenatal attendance). • While there is no specific RCT evidence around efficacy in pregnancy, evidence from the general population supports the use of antipsychotics to treat psychosis *(Goulding 2022[17] commentary)*. This is based on relapse if untreated and the impacts of untreated psychosis in pregnant women (e.g., stillbirth, poor antenatal attendance). • Not all antipsychotics are associated with metabolic effects. • Clozapine may be considered for use in women who do not respond to other antipsychotics and specialis input would be required when considering its use.
Certainty of evidence	The Harms Expert Subcommittee found that overall confounding was an issue across the studies included in the AHRQ review[18] as primary studies looking at harms of exposure to pharmacological agents during pregnancy are most likely to be observational studies (case-control studies, pregnancy registry studies, observational cohort studies, and secondary analyses of administrative databases). The AHRQ review[19] found insufficient evidence for overall estimation of risk for all outcomes when considering antipsychotics versus no exposure. The AHRQ review[20] found low confidence evidence of a lower risk of cardiac and major malformations for lamotrigine when compared with lithium.
Preferences and values, Resources, Equity, Acceptability and Feasibility	We did not systematically collect evidence regarding patients' preferences and values, resources, equity, acceptability, and feasibility of using antipsychotics by pregnant or postnatal women, or women who are breastfeeding. No concerns were raised regarding preferences and values, resources, equity, acceptability, and feasibility by the Harms Expert Subcommittee
Rationale for recommendation	In editing the recommendations on the use of antipsychotics by pregnant, postnatal, or breastfeeding women, the Harms Expert Subcommittee members agreed that: • Consensus-based recommendations xxiii and xxiv should be revised to specify metabolic-inducing antipsychotics and reflect the associated increased risk of gestational diabetes. • The consensus-based recommendation on clozapine use in pregnancy should be revised to reflect that it may be used in unique circumstances (where other treatments have failed) and that specialist psychiatric input is required.
Implications for practice	This recommendation has been modified since the previous Guideline on the basis of adverse effects on pregnancy associated with relapse. This requires education of health professionals and women and their families and may lead to changes in practice amongst prescribing speclialists.

Abbreviations: AHRQ, Agency for Healthcare Research and Quality; CBR, consensus-based recommendation; EBR, evidence-based recommendation; GRADE, Grading of Recommendations, Assessment, Development and Evaluation; RCT, randomized controlled trial.

[16, 18, 19, 20] Viswanathan, M.,Middleton, J. C.,Stuebe, A. M.,Berkman, N. D.,Goulding, A. N.,McLaurin-Jiang, S.,Dotson, A. B.,Coker-Schwimmer, M.,Baker, C.,Voisin, C. E.,Bann, C.,Gaynes, B. N. (2021). Maternal, Fetal, and Child Outcomes of Mental Health Treatments in Women: A Meta-Analysis of Pharmacotherapy. Psychiatric Research and Clinical Practice, 3(3), 123-140.

[17] Goulding, A. N., Metz, T. D., Middleton, J. C., Hoffman, M. C., Miller, E. S., Simas, T. A. M., ... & Gaynes, B. N. (2022). Pharmacologic Treatment for Perinatal Mental Health Disorders. Obstetrics & Gynecology, 139(2), 297-303.

Table 27 GRADE Evidence-to-decision process for considering the harms from anticonvulsant medications (by the Harms Expert Subcommittee)

gg	PP	**2017 recommendation:** Use caution when prescribing any antipsychotic to pregnant women, particularly for women with a propensity for weight gain and metabolic syndrome. ***(on advice of Prof Megan Galbally)*** **Revised recommendation:** Use caution when prescribing metabolic-inducing antipsychotics to pregnant women, due to the increased risk of gestational diabetes.	
12	EBR	**2017 recommendation:** Do not prescribe sodium valproate to women of childbearing age. **Revised recommendation:** Do not prescribe sodium valproate to pregnant women.	Strong
xxxiii	CBR	**2017 recommendation:** If anticonvulsants are prescribed to a woman who is breastfeeding, arrange close monitoring of the infant and specialist neonatologist consultation where possible. **Revised recommendation:** If prescribing lamotrigine to a woman who is breastfeeding, arrange close monitoring of the infant and specialist neonatologist consultation where possible.	

EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms	The Harms Expert Subcommittee considered the information presented in Technical Report Part D for anticonvulsant medications. The AHRQ review[21] found insufficient evidence for overall estimation of risk of anticonvulsant medication use for all outcomes by pregnant or postnatal women, or women who are breastfeeding.
Certainty of evidence	The Harms Expert Subcommittee found that overall confounding was an issue across the studies included in the AHRQ review[22] as primary studies looking at harms of exposure to pharmacological agents during pregnancy are most likely to be observational studies (case-control studies, pregnancy registry studies, observational cohort studies, and secondary analyses of administrative databases). The AHRQ review[23] found insufficient evidence for overall estimation of risk for all outcomes.
Preferences and values, Resources, Equity, Acceptability and Feasibility	We did not systematically collect evidence regarding patients' preferences and values, resources, equity, acceptability, and feasibility of using anticonvulsant medications by pregnant or postnatal women, or women who are breastfeeding. The Harms Expert Subcommittee did not raise any concerns regarding patients' preferences and values, resources, equity, acceptability, and feasibility of using anticonvulsant medication in pregnant or postnatal women, or women who are breastfeeding.
Rationale for recommendation	In editing the recommendations on the use of antipsychotics by pregnant, postnatal, or breastfeeding women, the Harms Expert Subcommittee members agreed that: • Consensus-based recommendations xxiii and xxiv should be revised to specify metabolic-inducing antipsychotics and reflect the associated increased risk of gestational diabetes. • The consensus-based recommendation on clozapine use in pregnancy should be revised to reflect that it may be used in unique circumstances (where other treatments have failed) and that specialist psychiatric input is required.
Implications for practice	This supports the need for education and training for health professionals about the danger of use of sodium valproate among women of childbearing age and provision of clear information to women.

Abbreviations: AHRQ, Agency for Healthcare Research and Quality; CBR, consensus-based recommendation; EBR, evidence-based recommendation; GRADE, Grading of Recommendations, Assessment, Development and Evaluation.

[21, 22, 23] Viswanathan, M.,Middleton, J. C.,Stuebe, A. M.,Berkman, N. D.,Goulding, A. N.,McLaurin-Jiang, S.,Dotson, A. B.,Coker-Schwimmer, M.,Baker, C.,Voisin, C. E.,Bann, C.,Gaynes, B. N. (2021). Maternal, Fetal, and Child Outcomes of Mental Health Treatments in Women: A Meta-Analysis of Pharmacotherapy. Psychiatric Research and Clinical Practice, 3(3), 123-140.

Table 28 GRADE Evidence-to-decision process for considering the harms from lithium (by the Harms Expert Subcommittee)

xxxix	CBR	**No change:** If lithium is prescribed to pregnant women, ensure that maternal blood levels are closely monitored and that there is specialist psychiatric consultation.
kk	PP	**2017 wording:** If lithium is prescribed to a pregnant woman, reduce the dose just prior to the onset of labour and aim to recommence treatment immediately after the birth at a pre-pregnancy dose. ***(on advice of Prof Megan Galbally)*** **Revised recommendation:** If lithium is prescribed to a pregnant woman, monitor lithium levels carefully and adjust individual dose prior to and after delivery.
xl	CBR	**No change:** Where possible, avoid the use of lithium in women who are breastfeeding.

EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms	The Harms Expert Subcommittee considered the information presented in Technical Report Part D for lithium. The AHRQ review[24] found insufficient evidence for overall estimation of risk of lithium use for all outcomes compared with no exposure by pregnant or postnatal women, or women who are breastfeeding. The AHRQ review[25] found low confidence evidence of a greater risk of cardiac and major malformations for lithium when compared with lamotrigine when used by pregnant or postnatal women, or women who are breastfeeding.
Certainty of evidence	The Harms Expert Subcommittee found that overall confounding was an issue across the studies included in the AHRQ review[26] as primary studies looking at harms of exposure to pharmacological agents during pregnancy are most likely to be observational studies (case-control studies, pregnancy registry studies, observational cohort studies, and secondary analyses of administrative databases). The AHRQ review[27] found that the evidence was insufficient for overall estimation of risk for all outcomes for lithium versus no exposure.
Preferences and values, Resources, Equity, Acceptability and Feasibility	We did not systematically collect evidence regarding patients' preferences and values, resources, equity, acceptability, and feasibility of using lithium by pregnant or postnatal women, or women who are breastfeeding. No concerns were raised regarding preferences and values, resources, equity, acceptability, and feasibility by the Harms Expert Subcommittee.
Rationale for recommendation	The Harms Expert Subcommittee members agreed that the current wording of the lithium recommendations is appropriate.

[24, 25, 26, 27] Viswanathan, M.,Middleton, J. C.,Stuebe, A. M.,Berkman, N. D.,Goulding, A. N.,McLaurin-Jiang, S.,Dotson, A. B.,Coker-Schwimmer, M.,Baker, C.,Voisin, C. E.,Bann, C.,Gaynes, B. N. (2021). Maternal, Fetal, and Child Outcomes of Mental Health Treatments in Women: A Meta-Analysis of Pharmacotherapy. Psychiatric Research and Clinical Practice, 3(3), 123-140.

Physical interventions

Transcranial magnetic stimulation (TMS)

The EWG agreed with the deliberations of the Harms Expert Subcommittee detailed in the table below and therefore the following table represents the decisions of both the Harms Expert Subcommittee and the EWG.

Table 29 GRADE Evidence-to-decision process for considering the harms from TMS (by the Harms Expert Subcommittee)

Proposed Recommendations	**None**
Proposed Practice Points	**None**
EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms	The Harms Expert Subcommittee considered the information presented in Technical Report Part D for transcranial magnetic stimulation. One new primary study was identified in the literature search for the current evidence review update, but this study was not sufficiently powered to allow the sub-committee to make any judgements about the benefits and harms of transcranial magnetic stimulation.
Certainty of evidence	The Harms Expert Subcommittee considered the results of the evidence review update on transcranial magnetic stimulation and found that the one study identified was a single small RCT (n=26) that was underpowered.
Rationale for recommendation	Members agreed to note in the Guideline that there is insufficient evidence to recommend for or against the use of transcranial magnetic stimulation in pregnant or postnatal women, or women who are breastfeeding.

Abbreviations: GRADE, Grading of Recommendations, Assessment, Development and Evaluation; RCT, randomized controlled trial.

Electroconvulsive therapy (ECT)

The EWG agreed with the deliberations of the Harms Expert Subcommittee detailed in the table below and therefore the following table represents the decisions of both the Harms Expert Subcommittee and the EWG.

Table 30 GRADE Evidence-to-decision process for considering the harms from ECT (by the Harms Expert Subcommittee)

qq	**PP**	**2017 wording:** In pregnant women, ECT should only be undertaken in conjunction with close fetal monitoring (using cardiotocography to monitor fetal heart rate) and access to specialist maternal-fetal medical support. ***(on advice of Prof Megan Galbally)*** **Revised recommendation:** In pregnant women, ECT should only be undertaken in conjunction with close fetal monitoring (using cardiotocography to monitor fetal heart rate), specialist pregnancy anaesthetic care and access to specialist maternal-fetal medical support.
EVIDENCE-TO-DECISION-CRITERIA		
Benefits and harms		The Harms Expert Subcommittee considered the information presented in Technical Report Part D for electroconvulsive therapy. No new primary studies on electroconvulsive therapy with concurrent controls were identified in the literature search for the current evidence review update.

Certainty of evidence	No new evidence was identified.
Rationale for recommendation	We did not systematically collect evidence regarding patients' preferences and values, resources, equity, acceptability, The Harms Expert Subcommittee members agreed that the current wording of the recommendations and practice point is appropriate, with further review by Prof Galbally requested.

Abbreviations: CBR, consensus-based recommendation; ECT, electroconvulsive therapy; EBR, evidence-based recommendation; GRADE, Grading of Recommendations, Assessment, Development and Evaluation.

Screening and preventive strategies for birth trauma

The deliberations of the EWG in considering recommendations on prevention and treatment are outlined below.

Table 31 GRADE Evidence-to-decision process for birth trauma preventative strategies

xliii	**CBR**	Use routine psychosocial screening (e.g. Postnatal Risk Questionnaire) to gain knowledge about a woman's risk of experiencing birth as traumatic.
xliv	**CBR**	If post-traumatic symptoms persist beyond 3 months, consider referral to appropriate mental health professionals for further assessment and/or care.

EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms	No evidence-based conclusions could be drawn on the benefits and harms of preventative strategies that protect against the development of postnatal post-traumatic stress disorder following a traumatic birth. The EWG agreed that the preventative methods proposed in the SA Health Guideline could benefit most or all women as they promote clear communication and informed decision making by the woman (if supported by the setting). The potential harms of the preventative strategies proposed in the SA Health Guideline are that they should not take place if no services are available to assist (e.g. if referral is identified).
Certainty of evidence	No evidence-based conclusions could be drawn on the certainty of evidence on preventative strategies that protect against the development of postnatal post-traumatic stress disorder following a traumatic birth as a de novo evidence review was not undertaken to develop this chapter (rather, existing guideline recommendations were considered for use). The EWG noted evidence contained within source guidelines showed that good evidence is available regarding continuity of care (specifically that it can reduce intervention rates which may be important for preventing PTSD).
Preferences and values, Resources, Equity, Acceptability and Feasibility	We did not systematically collect evidence regarding patients' preferences and values, resources, equity, acceptability, and feasibility of preventative strategies that protect against the development of postnatal post-traumatic stress disorder following a traumatic birth. The EWG commented that if supported by setting, preventative strategies are likely to be acceptable to women and health professionals. The EWG did not raise any concerns regarding feasibility of screening and prevention for PTSD following traumatic birth. The EWG noted that trauma-focused treatment needs to be delivered by specially trained health professionals, which raises issues of equity for women in rural and remote areas and Aboriginal and/or Torres Strait Islander women.

Rationale for recommendation	In formulating the consensus recommendations on screening and referral, the EWG acknowledged the following: • Births may be experienced as traumatic even when obstetrically straightforward and an event that is traumatic for one person may not be for another • Birth trauma can occur with or without PTSD and still cause associated distress • The term PTSD is commonly used by women to describe distress following birth trauma (noting that the distress is not PTSD) • The importance of psychosocial screening to identify those who might be at risk of developing PTSD • There are diagnostic tools available (e.g., The City Birth Trauma Scale is a questionnaire developed to measure birth-related post-traumatic stress disorder [PTSD]) • Trauma-informed care is an integral part of quality maternity care, and the importance of trauma-informed care should be noted in the narrative section of the birth trauma chapter • Preventative strategies should involve appropriate referral (rather than 'counselling' as stated in some source guidelines) • Unplanned intervention (including emergency caesarean section or instrumental birth) is associated with fear of subsequent birth and post-traumatic stress • There is evidence that continuity of care reduces intervention rates and is important for prevention of PTSD • Existing expectations of women about the birth play a role in the potential development of PTSD (e.g., if the birth itself didn't go as planned, if they were unable to adjust to being a parent) • Birth, social and cultural expectations can contribute to the perception of birth as traumatic.

Psychosocial and psychological treatments following traumatic birth

Table 32 GRADE Evidence-to-decision process for developing birth trauma treatment recommendations (psychosocial and psychological treatments)

xlv	CBR	Offer women who have post-traumatic stress disorder, which has resulted from a traumatic birth, a high-intensity psychological intervention (trauma-focused CBT or eye movement desensitisation and reprocessing [EMDR]).
xlvi	CBR	Do not offer single-session high-intensity psychological interventions with an explicit focus on 're-living' the trauma to women who experience a traumatic birth.

EVIDENCE-TO-DECISION-CRITERIA	
Benefits and harms	Only one source recommendation was evidence-based (Offer women with persistent post-traumatic stress disorder (PTSD) symptoms at 1 month referral to skilled professionals as per the NICE guidance on PTSD). Beyond this recommendation, no evidence-based conclusions could be drawn on the benefits and harms of general treatment strategies for postnatal post-traumatic stress disorder following a traumatic birth. The EWG concluded that most or all women will benefit from the general treatment strategies noted in the 2018 SA Health Guideline "Managing distress after traumatic birth" as they promote clear communication and informed decision making by the woman (if supported by the setting). The potential harms of the strategies proposed are that they should not take place if there are no services available to assist (e.g., if referral is identified). It is likely that the harms of single session, high-intensity psychological interventions with an explicit focus on 'reliving' the trauma outweighed the benefits (strong, do not do recommendation by NICE).

Certainty of evidence	Not applicable. No evidence-based conclusions could be drawn on the certainty of evidence of treatment strategies for post-traumatic stress disorder following a traumatic birth as a de novo evidence review was not undertaken to develop this chapter (rather, existing guideline recommendations were considered for use).
Preferences and values, Resources, Equity, Acceptability and Feasibility	We did not systematically collected evidence regarding patients' preferences and values, resources, equity, acceptability, and feasibility of psychosocial and psychological treatments for PTSD following traumatic birth. The EWG commented that if supported by setting, psychosocial and psychological treatment strategies are likely to be acceptable to women and health professionals. The EWG did not raise any concerns regarding feasibility of psychosocial and psychological treatment strategies for PTSD following traumatic birth. The EWG noted that EMDR requires trained health professionals which raises issues of equity for women in rural and remote areas and Aboriginal and/or Torres Strait Islander women.
Rationale for recommendation	In formulating the consensus recommendations on psychosocial and psychological interventions for PTSD following traumatic birth, the EWG acknowledged that EMDR may be contraindicated in complex PTSD, and that most psychologists are not trained in EMDR. Members recommended that the NICE 2014 recommendation on EMDR be used as a source recommendation but to keep text general (i.e., don't specify the number of EMDR sessions). Both recommendations were adopted with minor changes from the NICE 2014 Guideline Antenatal and Postnatal Mental Health: Clinical Management and Service Guidance (recommendation 1.9.5 and 1.9.6).

Pharmacological treatments following traumatic birth

Table 33 GRADE Evidence-to-decision process for developing birth trauma treatment recommendations (pharmacological treatments)

xlvii	**CBR**	Depending upon the woman's post-traumatic stress symptoms, consider the use of pharmacological treatments.
EVIDENCE-TO-DECISION-CRITERIA		
Benefits and harms **Certainty of evidence** **Preferences and values, Resources, Equity, Acceptability and Feasibility**	Members noted that pharmacological treatment options for PTSD are the same as those available for anxiety and to refer to that section of the Guideline.	
Rationale for recommendation	In formulating the consensus recommendations on pharmacological treatment interventions for PTSD following traumatic birth, the EWG acknowledged: • PTSD is a severe anxiety disorder and treatment involves use of selective serotonin reuptake inhibitors (SSRIs) or tricyclic antidepressant (TCAs), with TCAs used less commonly as SSRIs have a better side effect profile • Depending upon the patient's symptomology, consider using pharmacological treatments • A combination of behavioural therapy and pharmacotherapy outperforms either therapy alone; a stepped approach may be needed (e.g., psychological or combined therapy [psychological and pharmacological]) • Refer to the interventions for anxiety section as these interventions will be the same for PTSD.	

External review

External review, including methodological review, independent AGREE appraisal and independent peer review, was conducted in parallel with public consultation. No substantive changes that had not arisen through public consultation were suggested through this process.

Updating procedures

The developer is aware of the current requirement of the NHMRC for Guidelines to be updated at an interval no greater than 5 years. The developer commits to this timeframe, subject to appropriate funding. However, given the rapid emergence of relevant evidence in recent years, the developer is exploring ways in which the Guideline might be updated within a shorter timeframe, ideally in response to the publication of evidence that has the potential to change current recommendations or inform the development of new recommendations. The developer plans to update the current Guideline with methodology consistent with the principles and standards of the NHMRC current at the time of update.

4 Clarity of presentation

Specific and unambiguous recommendations

The evidence-based and consensus-based recommendations were worded based on the following principles:

- recommendations are succinct and action-oriented
- the action recommended is clearly articulated and matches the strength of the body of evidence
- women to whom the recommendation relates are identified
- where relevant, timing of the action is included.

Where there is uncertainty about the best care options, this is outlined in the text.

Management options

The Guideline addresses multiple management options and these are clearly articulated via the structure of the Guideline and the wording of the recommendations and practice points.

Identifiable key recommendations

The evidence-based recommendations, consensus-based recommendations and practice points are clearly identified by colour coding and use of separate numbering systems. The strength of the evidence is also clearly identified. A summary of recommendations is included.

5 Applicability

Facilitators and barriers

Facilitators

There are a number of facilitators to Guideline application which include the following:

- **Engagement of key stakeholders in the Guideline development -** Peak bodies that provide aspects of perinatal health and mental health care have been involved in the development of the Guideline from the outset.
- **The infrastructure of peak bodies -** Each of the Colleges will play a key role in communicating the Guideline to their members and advocating for its implementation through communication with College members in newsletters, academic publications in journals and presentation at conferences.
- **The infrastructure of the health system -** The framework of maternity, postnatal and primary care provision provides a vehicle for all aspects of Guideline implementation from consumer education through to screening and assessment and treatment provision. The health and community care landscape has been taken into account when considering the Guideline application across maternity, postnatal, general practice, public and private healthcare settings as well as the range of services available across jurisdictions.
- **The history of the National Perinatal Depression Initiative (NPDI) -** The Commonwealth Government's investment into the NPDI with States and Territories (2008-13) has provided some valuable history and infrastructure to implementation of the Guideline. Current investment is variable across States and Territories. Awareness of the state of play across each jurisdiction and ongoing relationships and collaboration with key Commonwealth and State Government and policy stakeholders provides an opportunity to continue to advocate and seek support for national Guideline implementation.

- **The development of a perinatal mental health website to house all information for consumers, carers and health professions -** COPE (Guideline developer) has been established to provide a dedicated focus on perinatal mental health. As part of this work, an extensive **website** has been developed to provide best practice information for consumers, carers and health professionals. The website will be updated to reflect the latest evidence for depression, anxiety, bipolar disorder and postpartum psychosis, and be expanded to include the additional mental health conditions that have been addressed in the current Guideline. In addition, this website will include all factsheets and screening aids (companion documents) and house the online training program (see below).
- **The development of a free, online, accredited training program for health professionals -** To support implementation, a free online training program will accompany the release of the Guideline by the Guideline developer (COPE). This will facilitate education for front-line health professionals and include coverage of all Guideline recommendations and practice points. In addition, all companion documents that have been developed for health professionals and consumers/carers will be embedded into the online program to direct people to specific information on each topic.
- **Innovative support for consumers and carers -** As much of the Guideline focus is on the need for education and information provision for consumers, emotional and mental health information relative to each stage in the perinatal period, as well as information and links to further information and factsheets derived from the Guideline are available **online** and as a free mobile application (The Ready to COPE App).
- **Innovative technology to facilitate screening in accordance with the Guideline -** As one of the greatest barriers to screening is time taken to do screening within tight maternity and postnatal appointments, the Guideline developer has developed a **digital screening platform** that allows screening to be undertaken electronically. Screening can be done privately by the patient on their mobile phone prior to, or at the appointment (in the waiting room or consultation). The feasibility trials and subsequent implementation across a range of primary, maternity and postnatal healthcare settings demonstrate the ability of the platform (iCOPE) to save time, reduce language barriers, improve screening rates and encourage disclosure. Programming of any additional tools recommended in the Guideline onto the iCOPE Platform will also facilitate their application. Furthermore, the automated production of instant clinical reports at the time of screening serves to guide health professionals in best practice with respect to screening outcomes and referral pathways. Consumers also can also access a tailored report (via email or SMS) detailing outcomes and referring to more information on the COPE website. At the time of writing the Guideline, the iCOPE tools and patient reports are available in 25 different languages.

Barriers

Barriers to application include the following:

- **Low screening in the private sector -** The greatest barriers to implementation are likely to be found in the private system, as many specialist obstetricians do not prioritise perinatal mental health and focus on physical health. Medicare item numbers aim to increase rates of screening and early detection of mental health problems and women at risk.
- **Lack of time to undertake screening and assessment -** As detailed above, time is a barrier and hence this is addressed through the selection of brief assessment tools and the digitisation of screening to improve screening rates, times, accuracy and inclusiveness.
- **Barriers among women -** Barriers among women include stigma, significant others normalising their emotional difficulties, desiring to manage mental health problems on their own, preferring to discuss feelings with significant others, not knowing what emotions are 'normal' and perceiving that the health professional is disinterested or lacks time. This may be improved by the provision of timely, relevant information and education about emotional and mental health in the perinatal period through the Ready to COPE App. Digital screening via the patient's phone also increases privacy and encourages disclosure at the point of screening.
- **Lack of validated screening tools for women of non-English-speaking backgrounds -** Screening is often not available, accurate or appropriately administered for women of non-English speaking backgrounds due to the lack of validated screening tools in other languages, and/or the accuracies and costs associated with interpreter services. This is improved through the provision and constant expansion of the iCOPE Digital screening platform in multiple languages.
- **Limited uptake of referral -** Research suggests that only half of women who screen positive follow up with a subsequent mental health assessment and 30-85% do not engage in treatment. This may be improved by consumers as well as health professionals having access to timely and appropriate referral pathways, including the provision of bulk-billing and telehealth services.

- **Workforce shortages -** There is continued demand for services across the healthcare and mental healthcare sector. There is a need to ensure the provision of specialist workforce training and service provision to build the capacity of the workforce to ensure access to timely and identification and appropriate referral.

Implementation advice/tools

In addition to deploying a range of approaches to raise awareness and ensure easy access to the Guideline, a range of engaging and innovative tools and mediums will be used to disseminate the contents of the Guideline across health professional groups, consumers and carers.

Health professionals

- Currently all Guideline information for health professionals is hosted under a specific tab on the **COPE website** as well as being housed on the Commonwealth Department of Health and Aged Care website. This will be updated and expanded to reflect changes to the Guideline.
- A range of companion documents for health professionals will be developed to enable easy access and reference to particular elements of the Guideline, as relevant to the respective professional bodies. This is likely to include a range of fact sheets to summarise key recommendations and practice points. These resources will be promoted widely across all College memberships and made available through COPE and College websites.
- The development of an online (accredited) training program to inform and educate health professionals about the Guideline recommendations and practice points. This **online training program** will be promoted widely across all College memberships.

Consumers and carers

- All information currently contained on the **COPE website** is underpinned by the previous Clinical Practice Guideline. As such, all website content will be reviewed to ensure it accurately reflects the new Guideline and directs people to access the Guideline and companion documents.
- The development, promotion and dissemination of companion documents for consumers and carers will facilitate the dissemination of Guideline information in a succinct and digestable format for consumers and carers.
- Ready to COPE, an innovative e-guide for consumers to receive relevant information throughout pregnancy and the postnatal period has been developed and widely disseminated. All information pertaining to mental health in the app is underpinned by the Clinical Practice Guideline, and provides an engaging and innovative approach to information dissemination for consumers and carers. The Ready to COPE guide can be accessed free of charge in Australia **online** or downloaded from the **App Store** or **Google Play** (Ready to COPE) for expectant and new mothers, fathers and non-birthing mothers.

Resource implications

The recommendations are considered to have a low requirement for additional resourcing. This is because the recommendations encompass psychometric tools or treatments that are already in use in clinical care in Australia. If anything, it is possible that the systematic use of psychosocial assessment and screening for depression and anxiety in the perinatal period will result in cost-savings from a whole of health system or societal perspective.

Monitoring/auditing criteria

As the peak body for perinatal mental health in Australia, COPE will continue to consult with service providers nationally to ensure the dissemination and application of the Clinical Guideline across the country. For those utilising digital screening, this will enable the monitoring of screening rates and outcomes across sites and settings in real time. It is noted that the ability to measure uptake of screening across and within jurisdictions will be crucial for designing and applying implementation strategies.

Further the integration of clinical advice into the clinical reporting facilitated by the iCOPE platform will serve to inform and guide best practice by the health professionals.

COPE will continue to liaise with representatives of all states and territories involved in the implementation of perinatal mental health initiatives.

6 Editorial independence

Funding body

Financial support

COPE acknowledges that the total amount of financial support of $750,000 plus GST for the development of the Guideline was received from the Commonwealth Department of Health and Aged Care.

Separate funding of $50,000 plus GST was received from the Commonwealth Department of Health and Aged Care for work on perinatal mental health assessment of fathers and non-birthing partners. As the two projects were concurrent, the same process was followed.

Editorial independence from funders - The commissioning of the Guideline development to COPE as the national peak body in perinatal mental health ensures editorial independence from the Commonwealth as the funding body.

Competing interests

Processes used for declaration and management of competing interests

At the outset of the Guideline development process, all representatives were informed of the importance of managing competing interests and ensuring that any potential conflicts of interest were identified in advance of any meeting (as evidenced in meeting minutes). Processes put in place to manage any potential conflicts of interest were as follows:

- All EWG members and proxies involved in the Guideline development process were required to complete a Declaration of Interest Form (as per the NHMRC requirements). These signed and scanned forms were reviewed by the Co-Chairs of the EWG and are held by the Guideline developer.
- On sending out agenda papers, EWG members were informed of the arising agenda items and asked to notify the Chairperson in advance of the meeting of any potential conflicts of interest that had arisen since the most recent meeting.
- Any arising conflicts of interest were adjudicated by the Chair or a nominated Co-Chair. When a conflict of interest was declared by a EWG member, he or she was invited to take part and contribute to discussions but was asked to exit the videoconference during discussion and when recommendations were being formed. A conflict of interest held by the Chair was managed by the Co-Chair and the area of conflict clearly stated. The same provisions as for other members were applied.
- If a conflict of interest was deemed to be material prior to a meeting, the member was asked to continue to contribute to the committee, with the above measures taken to limit the introduction of bias.

There was only one instance of a possible competing interest - the review of a clinical psychometric instrument (the ANRQ), which was developed by two of the expert working group members. This was made known to all members of the EWG at the outset of discussions. To address this issue, these members of the group were involved in the initial discussion of all available psychometric instruments but not in further discussion or the decision-making process.

Table 34 Competing interests of EWG members

REPRESENTATIVE	COMPETING INTEREST
Dr Nicole Highet	Developer of online screening tool and consumer education resources (Ready to COPE)
Prof Marie-Paule Austin	Has published in the area of screening and psychosocial assessment Developed the Antenatal Risk Questionnaire (ANRQ)
Dr Nicole Hall	Nil
Dr Suzanne Higgins	Nil
Ms Tamara Cavenett	Nil
Denise McDonald	Nil
Julie Borninkhof	Nil
Dr Rachael Hickinbotham	Nil
Dr Jan Taylor	Nil
Professor Rhonda Marriott	Nil
Dr Nicole Reilly	Has published in the area of screening and psychosocial assessment Developed the Antenatal Risk Questionnaire (ANRQ)
Sam Moses	Nil
Ariane Beeston	Nil

Public consultation

The NHMRC Act, 1992 (as amended), requires that the draft Guideline be released for a 30-day public consultation, so that the final Guideline can be submitted for approval by the CEO of the NHMRC, under Item 14A Approval by CEO of Guidelines for third parties, under the Act.

The draft Guideline was released for a 60-day public consultation. While a 30-day consultation is required in Section 14A of the NHMRC Act 1992 and accompanying regulations, it was agreed to hold a longer consultation period due to the consultation period coinciding with the summer break, which may affect the ability of some individuals to provide a submission. The public consultation began on 7 November 2022 and formally ended on 7 January 2023. Some additional submissions were accepted after this date, with the final submission accepted on 23 January 2023.

The consultation draft was disseminated through COPE company members:

- Australian College of Mental Health Nurses (ACMHN)
- Australian College of Midwives (ACM)
- Australian Psychological Society (APS)
- Maternal Child and Family Health Nursing Association (MCaFNA)
- Perinatal Anxiety and Depression Australia (PANDA)
- Royal Australian College of General Practitioners (RACGP)
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)
- Royal Australian and New Zealand College of Psychiatrists (RANZCP)
- The Congress of Aboriginal and Torres Strait Islander Nurses and Midwives (CATSINaM).

These key stakeholders were contacted via email and directed to the COPE website where papers could be accessed. Stakeholders were also asked to forward the information to other contacts who may be interested. In addition COPE promoted the public consultation process via their Facebook posts.

Representatives of state and territory health departments were also contacted and advised of the public consultation.

Of the 27 submissions received, 12 were from health professionals, 3 were from divisions of state/territory/Commonwealth health departments, 3 were from professional colleges/associations, 2 were from research groups, 6 were from non-government organisations and one was withdrawn.

The submissions provided useful feedback that enabled the EWG to expand on some areas in the background sections of the Guideline, including further understanding of the experiences of women from Aboriginal and/or Torres Strait Islander communities, rural and remote areas, women experiencing pregnancy in adolescence and LGBTQI+ people. Additional information on the prevalence and experience of psychological birth trauma was also received.

Feedback on other areas of the Guideline (concerning screening, prevention and treatment) allowed a more nuanced discussion around the evidence, including:

The consultation draft was disseminated through COPE company members:

- enhanced understanding of depression screening and psychosocial assessment in Aboriginal and/or Torres Strait Islander women and migrant and refugee women
- greater emphasis on enquiry about personal and partner use of drugs and alcohol and family violence
- revision of language around health behaviours
- additional indicators of potential difficulties in the mother-infant interaction
- greater emphasis on postpartum psychosis
- expanded discussion on psychological birth trauma.

Key concerns regarding the recommendations were:

- the use of the classifications of symptoms as mild, moderate or severe, without these being defined
- the perception that treatment would be based on classification of symptoms (i.e. women with mild symptoms would only be offered psychological treatment and women with moderate-to-severe symptoms would only be offered pharmacological treatment)
- the need for treatment decisions to reflect women's preferences
- the strength of the evidence underlying recommendations on screening for depression using the EPDS, psychosocial assessment using the ANRQ and SSRI use in the postnatal period.

The inclusion of 'moderate-to-severe' in the recommendations was based on consensus not evidence, so the recommendations have been modified to reflect this. First-line treatment has been qualified as first-line pharmacological treatment to remove the perception that psychological treatment is not a consideration. As reflecting women's preferences is not part of the evidence base, additional text has been included in the narrative to acknowledge that an agreement between treating health professional and the woman is needed before a treatment decision is made.

9	**EBR**	**2017 wording:** Consider the use of selective serotonin reuptake inhibitors (SSRIs) as first-line treatment for moderate-to-severe depression and/or anxiety in pregnant women. **Revised wording:** When prescribing antidepressants to pregnant women, consider SSRIs as first-line pharmacological treatment for depression and/or anxiety.	Conditional
10	**EBR**	**2017 wording:** Use SSRIs as first-line treatment for moderate-to-severe depression in postnatal women. **Revised wording:** When prescribing antidepressants to women in the postnatal period, use SSRIs as first-line pharmacological treatment for depression.	Strong

In response to comments on the strength of the evidence, additional information has been included in the relevant sections of the Guideline and in Section 3:

- to clarify that the foundation for the evidence base is the 2017 Technical Report, with the new evidence lacking the certainty to change the strength or direction of the recommendation
- to provide further details on the links between 2017 evidence and recommendations.

For EPDS screening, comment has also been included on the outcomes considered important by the EWG in reviewing the evidence.

Dissemination and implementation

As Australia's peak body in Perinatal Mental Health, the Centre of Perinatal Excellence will provide leadership and collaborate with its membership to support and promote the implementation of the updated Guideline.

The final complete Guideline, together with a series of companion documents and resources (see above), will be disseminated broadly through the implementation of the following strategies:

Overarching

- Production of Guideline and companion documents for health professionals and consumers, which will be available from the COPE website.
- Placement of Guideline on key websites (COPE, Colleges, PANDA and the Commonwealth Government).
- E-dissemination of the Guideline through all professional bodies.
- National and targeted Media releases to announce the release of the new Perinatal Guideline.

Health Professionals (targeted)

- Writing of newsletters and articles to be disseminated across all professional bodies (COPE Membership) to inform respective college members of the new Guideline and where and how to access them.
- Presentation of key recommendations at key meetings/conferences.
- Publication of journal articles for journals commonly referred to by health practitioners.

Consumers and carers (targeted)

- Promotion of key recommendations of interest for consumers across broad and targeted media (including broad-span and social media channels).
- Education of all staff at the PANDA Helpline regarding the key recommendations and the implications for advice to consumers who may be calling the helpline.
- The development of targeted social media to promote key messages and direct consumers to the Guideline and companion documents.
- Placement and links to Guideline and companion documents on partner organisation websites (e.g. beyondblue; PANDA; Pregnancy, Birth and Baby; Healthshare; Gidget Foundation Australia).

COPE

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