Mental health care in the perinatal period: Australian clinical practice guideline

2023 Update

Technical Report Part A:

Overall approach for developing the Australian Perinatal Mental Health Guideline

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CONSULTATION VERSION

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CONTENTS

TABLES

Abbreviations

ALPHA	Antenatal Psychosocial Health Assessment
ANRQ	Antenatal Risk Questionnaire
ANRQ-R	Antenatal Risk Questionnaire - Revised
ANRQ-2A	2 ‘anxiety’ items from the Antenatal Risk Questionnaire
ARPA	Antenatal Routine Psychosocial Assessment
AUROC	area under the receiver-operating characteristics curve
CALD	culturally and linguistically diverse
CAME	Contextual Assessment of Maternity Experience
CAN-M	Camberwell Assessment of Need – Mothers
CBT	cognitive behavioural therapy
CIDI	Composite International Diagnostic Interview
COPE	Centre of Perinatal Excellence
DASS-21	21-item Depression Anxiety Stress Scales
DSM	Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 4th edition; DSM-V, 5th edition)
EPDS	Edinburgh Postnatal Depression Scale
EWG	Expert Working Group
GAD	Generalised Anxiety Disorder
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 (ICD-10, 10th revision)
IPT	Interpersonal psychotherapy
IUGR	Intrauterine growth restriction
KMMS	Kimberley Mum’s Mood Scale
K10	Kessler Psychological Distress Scale (10 item)
LGBTQI+	lesbian, gay, bisexual, transgender, queer/questioning, intersex
LR	likelihood ratio
LR-	negative likelihood ratio
LR+	positive likelihood ratio
MDD	major depressive disorder
MINI	Mini-International Neuropsychiatric Interview
PHQ	Patient Health Questionnaire
PHQ-2	first 2 items of the PHQ-9
PHQ-9	Patient Health Questionnaire-9
PICO	population-intervention-comparator-outcome
PNAS	Poor neonatal adaptation syndrome
PNMH	perinatal mental health
PNRQ	Postnatal Risk Questionnaire
PNRQ-R	Postnatal Risk Questionnaire - Revised
PRQ	Pregnancy Risk Questionnaire

PTSD	post-traumatic stress disorder
SCID	Structured Clinical Interview for DSM Disorders
SFGA	Small for gestational age
SSRI	selective serotonin reuptake inhibitor
STAI	State-Trait Anxiety Inventory
TMS	Transcranial magnetic stimulation

A1. Scope and purpose

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).

In October 2017, the Centre of Perinatal Excellence (COPE) published a national clinical practice guideline on *Effective Mental Health Care in the Perinatal Period* (hereafter referred to as the **2017 Australian Guideline**). This Technical Report (and accompanying Technical Reports Part B, C, D and E) provide an overview of the Evidence Review Update conducted for the 2023 version of the Australian Guideline.

A1.1 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 evidence review to support the 2023 version of the Guideline 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
- 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 evidence review commissioned by COPE in 2021 covered perinatal mental health assessment of fathers and non-birthing partners.

A1.2 Expected benefits or outcomes

The 2023 version of the Guideline aims to:

- improve a women’s emotional wellbeing, 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 fathers and 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 this Guideline will inform local, state and national policy surrounding the timely implementation of appropriate tools to ensure early identification of women's 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.

A1.3 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 tools — all pregnant or postnatal women
- screening tools — all pregnant or postnatal women
- treatment and prevention 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).

While not a direct target population for the Guideline update, perinatal mental health assessment in fathers and non-birthing partners was covered in a separate evidence review commissioned by COPE in 2021. The EWG considered this evidence review and the resulting consensus-based recommendations and agreed to include them in this Guideline update. Fathers and non-birthing partners can be considered a target population of this Guideline although this population was not specifically included in the evidence review to support the 2023 version of the Guideline (which is focused on the birthing parent).

A2. Clinical questions

The topics under investigation in the Evidence Review Update mirror the three main topics that were addressed in the 2017 Australian Guideline, with the addition of the new topic, birth trauma. The broad topics in the updated Guideline are as follows.

- 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 include:

- What are the most appropriate methods for psychosocial assessment of birthing parents (and fathers or non-birthing partners) at risk of mental health problems in the perinatal period?
- What are the most appropriate methods for screening birthing parents (and fathers or non-birthing partners) 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 for the Evidence Review Update are summarised in Table 1 below.

The clinical research questions from the separate fathers and non-birthing partners evidence review were:

- 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?
- What are the most appropriate methods for screening fathers or non-birthing partners for depression and anxiety in the perinatal period?

These questions and sub-questions have also been included for reference in Table 2 below (these questions were not part of this Guideline Evidence Review Update).

Table 1 Clinical Research questions (birthing parent)

	Psychosocial assessment
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?
	Mental health screening
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?
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?
	Treatment and prevention interventions
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?
Main question	**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 (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?
Main question	**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?**
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?
Main question	**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 (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?
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?

Table 2 Clinical Research questions (fathers and non-birthing partners)

	Psychosocial assessment
Main question	**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?**
Sub-questions	What is the performance (defined as reliability, validity and accuracy) of multidimensional tools for perinatal psychosocial assessment?
	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?
	What is the acceptability to fathers/non-birthing partners, health professionals, and the general public of multidimensional tools for perinatal psychosocial assessment?
	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?
	Mental health screening
Main question	**What are the most appropriate methods for screening fathers or non-birthing partners for mental health problems in the perinatal period?**
Sub-questions	What is the performance (defined as reliability, sensitivity, specificity, positive likelihood ratio, and negative likelihood ratio) of tools for perinatal mental health screening?
	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?
	What is the acceptability to fathers/non-birthing partners, health professionals, and the general public of screening for perinatal mental health screening?
	What is the effectiveness (defined as impact on detection, care sought or received, and mental health outcomes) of screening for perinatal mental health screening?
	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?

A3. Evidence review methods

The systematic literature reviews conducted to support the 2017 version of the Australian Perinatal Mental Health Guideline were updated to identify new evidence relating to psychosocial assessment, mental health screening, and treatment and prevention interventions in birthing parents. The overall approach to the **Evidence Review Update** is illustrated in Figure 1. Further information is provided in subsequent sections of this report.

For the new topic on the prevention and management of mental health problems as a result of **birth trauma**, recommendations were adopted/adapted from existing clinical practice guidelines. The process and methods used to develop guidance for the Australian health care context is summarised in Figure 2.

The research questions relating to perinatal mental health assessment in **fathers and non-birthing partners** were addressed in a separate process prior to commencement of the Guideline update. The systematic literature review was conducted in September/October 2021 and based on this review, several consensus-based recommendations were developed by the Fathers and Partners Expert Advisory Committee that covered psychosocial assessment and mental health screening of fathers and non-birthing partners.

A3.1 Literature searches

For the **Evidence Review Update**, literature searches were performed to identify relevant new evidence relating to psychosocial assessment, depression and anxiety screening, and treatment and prevention interventions for mental health problems in birthing parents in the perinatal period. The searches were conducted in February and March 2022. Further details regarding the search strategies and search dates are available in the relevant Technical Reports:

- Part B – Psychosocial assessment and screening for depression and anxiety in the perinatal period
- Part C – Effectiveness of treatment and prevention interventions for depression and anxiety in the perinatal period
- Part D – Harms associated with treatment and prevention interventions for mental health disorders in the perinatal period.

Details of the searches for existing clinical practice guidelines on birth trauma and post-traumatic stress disorder (PTSD) can be found in the relevant Technical Report:

- Part E – Treatment and prevention of mental health problems arising from traumatic birth experience.

Figure 1 Overall approach to the Evidence Review Update of topics covered in the 2017 Australian Guideline

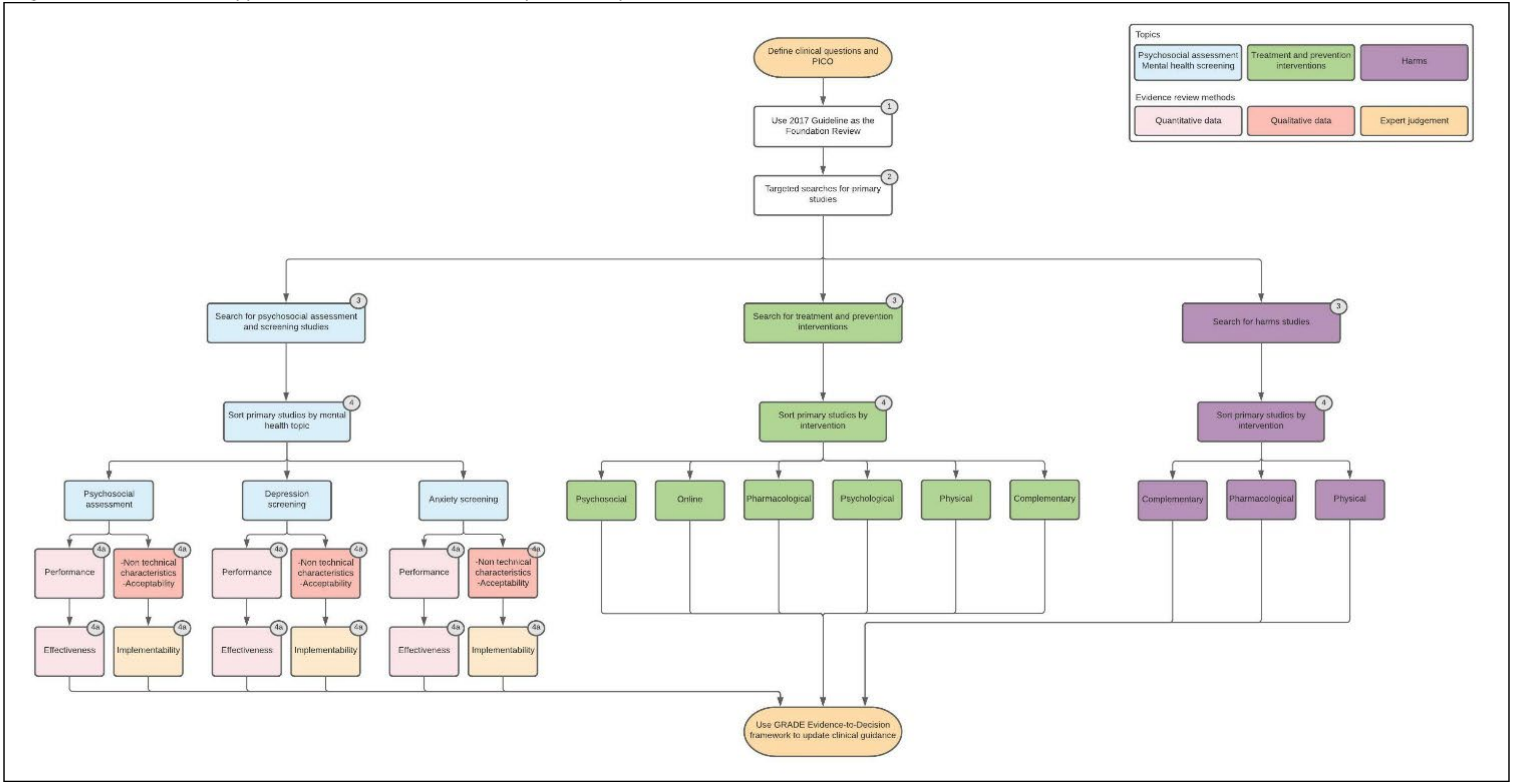
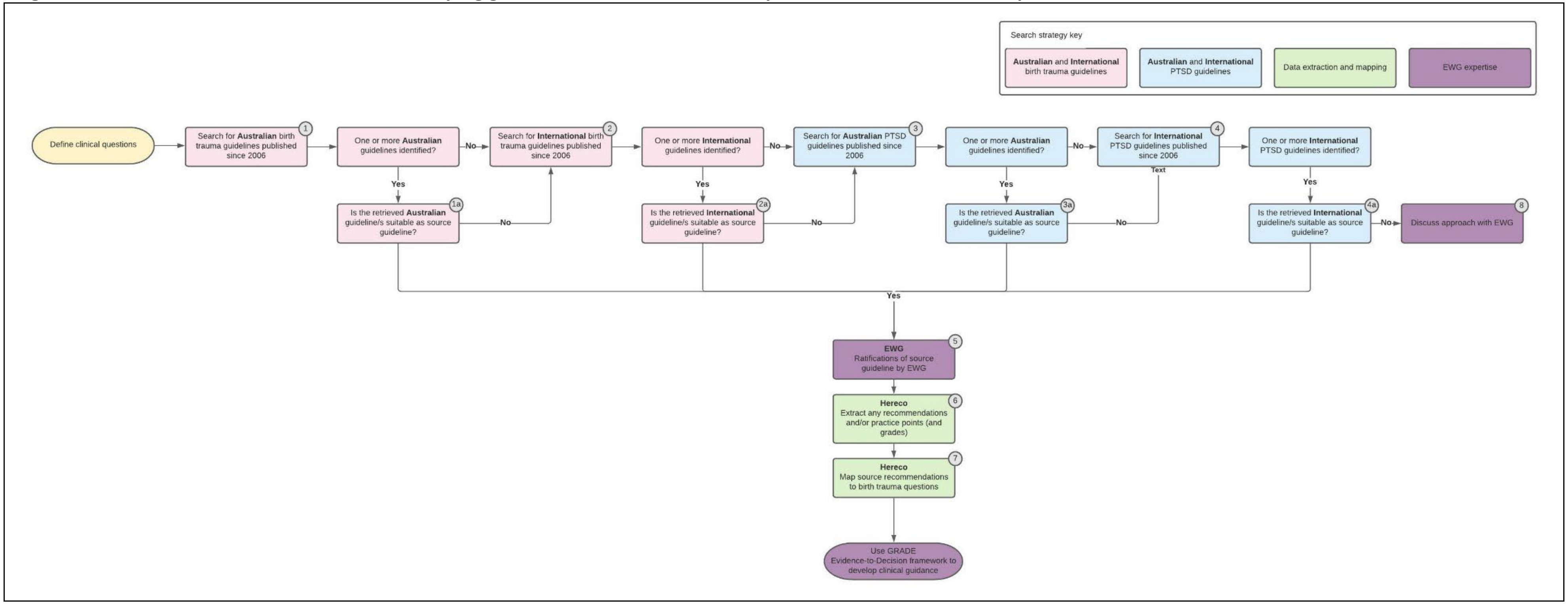


Figure 2 Process and methods for developing guidance on the treatment and prevention of mental health problems as a result of birth trauma



A3.2 PICO criteria

Detailed PICO (population-intervention-comparator-outcome) criteria for each research question are provided in Table 3 to Table 7 for the Evidence Review Update of the 2017 Australian Guideline. The PICO criteria were pre-specified in a research protocol approved by the Expert Working Group (EWG) and were used as the basis for study selection.

Table 3 Detailed PICO criteria for Q1: Psychosocial assessment

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 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, CAN-M, 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** *Critical outcomes* • Validity • Reliability • Predictive accuracy (OR odds of identifying a factor of concern) *Important outcomes* • Sensitivity • Specificity **Clinical usefulness** *Critical outcomes* • 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; LGBTQI+, lesbian, gay, bisexual, transgender, queer/questioning, intersex; PNRQ, Postnatal Risk Questionnaire; PNRQ-R, Postnatal Risk Questionnaire – Revised; PRQ, Pregnancy Risk Questionnaire.

Table 4 Detailed PICO criteria for Q2: Screening for depression

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 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

Question 2	What are the most appropriate methods for screening the birthing parent for depression in the perinatal period?	
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** *Critical outcomes* • Positive Likelihood Ratio (LR+) • Negative Likelihood Ratio (LR-) • AUROC	*Important outcomes* • Sensitivity • Specificity • Youden's index
	Clinical usefulness *Critical outcomes* • Acceptability to women, to healthcare providers, to the general public • Mental health outcomes	*Important outcomes* • 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); 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.

Table 5 Detailed PICO criteria for Q3: Screening for anxiety

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 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** *Critical outcomes* • Positive Likelihood Ratio (LR+) • Negative Likelihood Ratio (LR-) • AUROC	*Important outcomes* • Sensitivity • Specificity
	Clinical usefulness *Critical outcomes* • Acceptability to women, to healthcare providers, to the general public • Mental health outcomes	*Important outcomes* • 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); MINI, Mini-International Neuropsychiatric Interview; STAI, State-Trait Anxiety Inventory; SCID, Structured Clinical Interview for DSM Disorders.

Table 6 **Detailed PICO criteria for Q4&5: Interventions for the treatment or prevention of metal health problems**

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 mental 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>Safety</u> • Side effects	<u>Mother-infant interactions</u> • Mother-infant attachment problems • Positive mother-infant interaction • Maternal sensitivity

Abbreviations: PTSD, post-traumatic stress disorder.

Table 7 **Detailed PICO criteria for Q6: Harms associated with treatment and prevention interventions**

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
	  o antidepressants, antipsychotics, mood stabilisers (including anticonvulsants, benzodiazepines and z-drugs), lithium
	• Complementary
	  o omega-3 fatty acids, St John's wort, Ginkgo biloba
	• Physical
	  o ECT, TMS

Comparator	• No exposure • Exposure to an active comparator

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?**	
Outcomes	**Fetal, infant or child harms** *Malformations* • Major malformations • Cardiac malformations • Septal malformations *Pregnancy and birth outcomes* • Neonatal mortality • Stillbirth • Miscarriage • Preterm birth • SFGA/IUGR • PNAS • Persistent pulmonary hypertension • Respiratory distress • Tremors • Convulsions *Neurodevelopmental outcomes* • 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.

The pre-specified psychosocial, psychological, online, pharmacological, complementary and physical interventions targeted in the evidence reviews are listed in Table 8.

Table 8 Eligible psychosocial, psychological, online, pharmacological, complementary and physical interventions

Psychosocial	Psychological	Online

• Psychoeducation
• Psychoeducational booklet
• Social/peer support
• Online peer-to-peer support
• Home visits
• Non-mental health-focused education and support
• Pre-delivery discussion
• Post-delivery discussion
• Post-miscarriage self-help
• Seeing and/or holding stillborn infant
• Co-parenting interventions
	• Structured psychological interventions (CBT and IPT)
	• Directive counselling
	• Non-directive counselling
	• Case management / individualised treatment
	• Self-help or facilitated self-help
	• Post-traumatic birth counselling
	• Post-miscarriage counselling
	• Mother-infant relationship interventions
	• Eye movement desensitisation and reprocessing (EMDR)
	• Acceptance and commitment therapy (ACT)
	• Mindfulness
		• Web-based and computer-based online programs
		  ○ Guided
		  ○ Self-guided/unguided

Pharmacological	**Complementary**	**Physical**

• Antidepressants
• Antipsychotics
• Mood stabilisers
  ○ Anticonvulsants
  ○ Benzodiazepines and z-drugs
• Lithium
• Dexamphetamine
	• Omega-3 fatty acids
	• St John's wort
	• Ginkgo biloba
		• Exercise
		• Yoga
		• Acupuncture
		• Electroconvulsive therapy (ECT)
		• Transcranial magnetic stimulation (TMS)
		• Meditation

Abbreviations: CBT, cognitive behaviour therapy; IPT, interpersonal psychotherapy

The PICO criteria for the evidence review of perinatal mental health assessment of fathers and non-birthing partners are in Tables 9 and 10.

Table 9 Detailed PICO criteria for psychosocial assessment in fathers and non-birthing partners

	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:
		• Fathers/non-birthing partners with previous mental health problems and/or a history of trauma
		• Aboriginal and Torres Strait Islander fathers/non-birthing partners
		• Refugee and asylum seeker fathers/non-birthing partners
		• Fathers/non-birthing partners from 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 ANRQ, PRQ, ALPHA, PAT, PAT-2, BRO	

	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?	
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** *Critical outcomes* • Predictive accuracy (OR of identifying a factor of concern) • Positive Predictive Value (PPV) • Negative Predictive Value (NPV) • Positive Likelihood Ratio (LR+) • Negative Likelihood Ratio (LR-) **Clinical usefulness** *Critical outcomes* • Acceptability to fathers & non-birthing partners, to healthcare providers, to the general public	*Important outcomes* • Sensitivity • Specificity • AUROC • • •
Additional information & Data extraction	• Evaluation of applicability (country, setting and availability of normative data) Inclusion of non-technical characteristics • Number of items • Time to administer • Perinatal/postnatal timing • Mode of delivery • Validation • Complexity of scoring • Training requirements • Available languages Information on practice implications • 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; 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.

Table 10 Detailed PICO criteria for screening for mental health problems in fathers and non-birthing partners

	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:
		• Fathers/non-birthing partners with previous mental health problems and/or a history of trauma
		• Aboriginal and Torres Strait Islander fathers/non-birthing partners
		• Refugee and asylum seeker fathers/non-birthing partners
		• Fathers/non-birthing partners from migrant or CALD backgrounds

	What are the most appropriate methods for screening fathers or non-birthing partners for mental health problems in the perinatal period?
Intervention	• Relevant screening tools to identify people with current mental health problems in the perinatal period ○ Limited to EPDS, PHQ-2 (Whooley questions), PHQ-9, K-10, K-6, MGMQ, GMDS, GAD-7, DASS-21, STAI, BDI
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** *Critical outcomes* • Sensitivity • Specificity • Positive likelihood ratio (LR+) • Negative likelihood ratio (LR-) *Important outcomes* • AUROC **Clinical usefulness** *Critical outcomes* • Mental health outcomes • Acceptability to fathers & non-birthing partners, to healthcare providers, to the general public *Important outcomes* • 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) Inclusion of non-technical characteristics • Number of items • Time to administer • Perinatal/postnatal timing • Mode of delivery • Complexity of scoring • Training requirements • Available languages Information on practice implications • 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; 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; K-10/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.

A3.3 Evidence appraisal

GRADE (Grading of Recommendations, Assessment, Development and Evaluations) methodology was used to appraise the quality of the evidence for each intervention and outcome. Further details on the GRADE approach are in Technical Reports Part B-D. Consistent with the 2017 Australian Guideline, a hybrid method was developed for quality appraisal of psychosocial assessment instruments, and is described in detail in Technical Report Part B.

A4. Consideration of the clinical evidence

The EWG considered the evidence presented in Technical Reports Parts B through E at meetings held in 2022:

- Psychosocial assessment and screening for depression and anxiety in the perinatal period (Part B) was considered by the EWG on 12 September 2022
- Effectiveness of treatment and prevention interventions for depression and anxiety in the perinatal period (Part C) was considered by the EWG on 29 September 2022
- Harms associated with treatment and prevention interventions for mental health disorders in the perinatal period (Part D) was considered by the Harms Expert Subcommittee on 12 August 2022 and by the EWG on 29 September 2022
- Treatment and prevention of mental health problems arising from traumatic birth experience (Part E) was considered by the EWG on 1 April 2022

The EWG also considered the draft consensus-based recommendations developed by the Fathers and Partners Expert Advisory Committee in December 2021, based on a separate systematic review of the evidence on perinatal mental health assessment in fathers and non-birthing partners.

A structured evidence-to-decision framework was used to assist with the development of new recommendations and amendment of existing recommendations. Completed evidence-to-decision tables are available in the Guideline.

Membership of the EWG, the Harms Expert Subcommittee and the Fathers and Partners Expert Advisory Committee is provided in the Administrative Report.