Antenatal and postnatal mental health: clinical management and service guidance –Review questions and protocols

Contents

1. Experience of care

Review question(s)	1.1 What factors prevent women with a mental health problem who are antenatal or postnatal accessing mental healthcare services? 1.2 What **factors** improve or diminish the experience of services for women with a mental health problem who are antenatal or postnatal? 1.3 What **modifications** to services improve the experience of using services for women with a mental health problem who are antenatal or postnatal?
Sub-question(s)	Where possible, consideration should be given to the specific needs of:- • black and minority ethnic groups • socioeconomic groups • asylum seekers and refugees • women who are victims of trafficking • women with learning and physical disabilities • gypsies and travellers • women in prison Where possible, the review will conducted based on primary diagnosis of:- • depression • psychosis (including schizophrenia, schizoaffective disorder, postpartum psychosis and bipolar disorder) • anxiety disorders (including panic disorder, generalised anxiety disorder, obsessive-compulsive disorder, tokophobia, post-traumatic stress disorder) • personality disorders (including schizoid, avoidant, obsessive-compulsive, borderline, anti-social personality disorder) • substance misuse (including drugs and alcohol) • eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified, and binge eating) • sub-threshold disorders
Chapter	Chapter 8. Experience of care
Objectives	• To identify obstacles to access by synthesising existing reviews and through expert consensus. • To identify factors that improve or diminish the experiences of health and social services for women with a mental health problem who are in the antenatal or postnatal period. • To evaluate the effectiveness of interventions for improving the experience of health and social services for women with a mental health problem who are in the antenatal or postnatal period.
Criteria for considering	

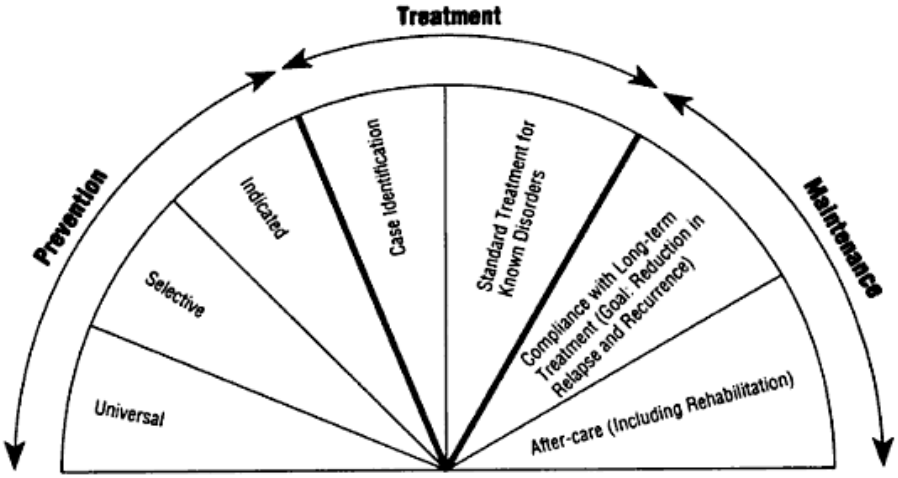
studies for the review	
• **Population**	**Included** Women during the antenatal and postnatal period (from delivery to the end of the first year). Include women:- • With sub-threshold symptoms of a mental health problem • Women who are in the antenatal or postnatal period considered to be 'at risk' of developing a mental health problem • With existing mild, moderate and severe disorders • Who are currently receiving treatment (psychosocial or pharmacological) for an existing mental health problem **Excluded** • Women who are greater than one year into the postnatal period • Women who are not in the antenatal or postnatal period (up to one year postnatal) If some, but not all, of a study's participants are eligible for review, the study authors will be contacted for disaggregated data. If appropriate disaggregated data can not be obtained, then a study will be included if the majority (at least 51%) of its participants are eligible for the guideline review. Women who are more than 1 year into the postnatal period but are giving retrospective reports of the immediate postnatal period (within 1 year after childbirth) will also be included.
• **Intervention**	**Review question 1.1** • Factors or attributes of the individual who requires mental healthcare, that can inhibit access to services • Practitioner-level factors or attributes can inhibit an individual from accessing healthcare **Excluded factors** • Systems and processes • Practical or resource-based factors **Review question 1.2** Actions by services that could improve or diminish the experience of care for example:- • Form, frequency, and content of interactions with service users, families, carers or peers • Sharing information with and receiving information from service users, families, carers or peers • Planning of care with service users, families, carers or peers **Review question 1.3** Any intervention delivered directly to the service user, families, carers or peers.

	Excluded interventions Psychosocial and pharmacological interventions for carers, families and peers with specific mental health problems will not be included as they are addressed in other guidelines. The provision of financial and practical support (for example direct payments) is outside of the scope of this guideline and will not be included.
• **Comparison**	None
Critical Outcomes	**Review question 1.1** Identified factors affecting access **Review question 1.2** Themes and specific issues that service users identify as improving or diminishing their experience of healthcare services **Review question 1.3** Service user: • Engagement, acceptability and uptake of services • Retention • Quality of Life • Satisfaction (validated measures only, specific items will not be analysed)
• Study design	**Review question 1.1 and 1.2** • Systematic reviews of qualitative studies, primary qualitative studies, surveys. **Review question 1.3** • RCTs • Systematic reviews of RCTs • Systematic reviews of qualitative studies, primary qualitative studies, surveys. Books, dissertation abstracts, trade magazines, policy and guidance, non-English language papers, and non-empirical research will be excluded.
• Include unpublished data?	Yes but only where: • the evidence was accompanied by a report containing sufficient detail to properly assess the quality of the data • the evidence was submitted with the understanding that data from the study and a summary of the study's characteristics will be published in the full guideline. Therefore, the GDG should not accept evidence submitted as commercial in confidence. However, the GDG should recognise that unpublished evidence submitted by investigators, might later be retracted by those investigators if the inclusion of such data would jeopardise publication of their research.
• Restriction by date?	Systematic reviews of qualitative studies, primary qualitative studies, surveys: 1995 to 7 April 2014 Systematic reviews of RCTs, RCTs: 2006 to 7 April 2014

• Minimum sample size	Include all sample sizes greater than one
• Study setting	Primary, secondary and tertiary healthcare services that are relevant to the NHS. This guideline will also be relevant to the work of, but will not provide specific recommendations to, NHS funded services (e.g. social services, or the non-statutory sector).
Search strategy	**Review question: 1.1, 1.2 ,1.3** Study design searched: Systematic reviews of qualitative studies, primary qualitative studies, surveys. Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Date restrictions: 1995 to 7 April 2014 **Review question: 1.3** Study designs searched: RCTs, systematic reviews of RCTs Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA Date restrictions: 2006 to 7 April 2014
Searching other resources	Hand-reference searching of retrieved literature
The review strategy	**Review question 1.1 & 1.2** Thematic synthesis of qualitative reviews. We will use a modified matrix of service user experience to organise themes. **Review question 1.3** The initial aim is to conduct a meta-analysis evaluating the clinical effectiveness of the interventions. High quality systematic reviews (e.g. Cochrane reviews) identified as part of the search will be utilised but will only be used if they meet the following criteria:- • Methodology of the review is deemed appropriate and is in keeping with guideline methods • PICO of the review is relevant to the guideline • There review is of a high quality without substantial errors that could have an impact on conclusions and guideline recommendations. For each review, we will also extract: year of review; countries of included studies; total number of study participants; inclusion and exclusion criteria; age (mean); race (percent white); diagnosis. For each intervention or comparison group of interest, we will also extract: dose; frequency; duration of interventions.

2. Interventions for the prevention of mental health problems

Review question(s)	**Prevention** 2.1 What is the effectiveness of selective preventative interventions (for women with no risk factors) in reducing the likelihood of developing mental health problems in pregnancy or the postnatal period? 2.2 What is the effectiveness of indicated preventative interventions (for women with identified risk factors present) in reducing the likelihood of developing mental health problems in pregnancy or the postnatal period? 2.3 What strategies should be adopted to minimise potential harm to the women or the fetus/infant of these interventions?
Sub-question(s)	Where possible, consideration should be given to the specific needs of:- • black and minority ethnic groups • socioeconomic groups • asylum seekers and refugees • women who are victims of trafficking • women with learning and physical disabilities • gypsies and travellers • women in prison Where possible, the review will conducted based on primary diagnosis of:- • depression • psychosis (including schizophrenia, schizoaffective disorder, postpartum psychosis and bipolar disorder) • anxiety disorders (including panic disorder, generalised anxiety disorder, obsessive-compulsive disorder, tokophobia, post-traumatic stress disorder) • personality disorders (including schizoid, avoidant, obsessive-compulsive, borderline, anti-social personality disorder) • substance misuse (including drugs and alcohol) • eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified, and binge eating) • sub-threshold disorders
Chapter	Chapter 7: Prevention interventions
Objectives	To evaluate the clinical effectiveness of prevention interventions for women who are in the antenatal or postnatal period, with and without identified baseline risk factors.

Background notes	The Committee on Prevention of Mental Disorders (IOM) [1] have distinguished between three levels of interventions: prevention, treatment, and maintenance (see Figure 1). Prevention interventions were further categorised into universal, selective and indicated. For the purposes of this guideline, only the following are eligible for this review: **Selective Prevention Interventions:** targeted to individuals or a subgroup of the population whose risk of developing mental disorders is significantly higher than average, (e.g. biological, psychological, or social risk factors). For the purpose of this review, selective prevention interventions will target all women who are pregnant or in the postnatal period (with no baseline risk factors). **Indicated Prevention Interventions:** targeted to high risk individuals who are identified as having minimal but detectable signs or symptoms foreshadowing mental disorder or biological markers indicating predisposition for mental disorder, but who do not meet diagnostic criteria for disorder at the current time. For the purpose of this review individuals are defined as all women who are pregnant or in the postnatal period with baseline risk factors.  Figure 1. The mental health intervention spectrum for mental disorders (from Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention ...By Patricia Beezley Mrazek, Institute of Medicine (U.S.). Committee on Prevention of Mental Disorders, United States. Congress)
• **Population**	**Included** **Review question 2.1** Women who are antenatal or postnatal (from delivery to the end of the first year). Inclusion is not based on any other baseline risk factors. **Review question 2.2** Women who are antenatal or postnatal (from delivery to the end of the first year) whom are considered to be 'at risk' of developing mental

[1] Muñoz, R. F., Mrazek, P. J., and Haggerty, R. J. (1996) Institute of Medicine report on prevention of mental disorders: Summary and commentary. *American Psychologist, 51*(11), 1116-1122.

	health problems (see Australian guideline and Scottish Intercollegiate Guidelines Network (SIGN) for further reference). Include women:- • with a history of a mental health problem but who do not meet diagnostic criteria for mental health problems at the current time • with sub-threshold symptoms • experiencing major life events • with a family history of mental health problems • with psychosocial risk factors (e.g. SES) • with infant regulatory problems • who experienced an operative delivery or traumatic birth • experienced a miscarriage • who are adolescents **Exclude women:-** • who are currently receiving treatment (psychosocial or pharmacological) for an existing mental health problem (see review of interventions for the treatment of a mental health problem) • who are greater than one year into the postnatal period • who are not in the antenatal or postnatal period (up to one year postnatal)

• **Intervention**	**Review question 2.1**
	• **Selective prevention intervention** for all women in the antenatal or postnatal period with no other pre-specified baseline risk factors.
	
	Review question 2.2
	• **Indicated prevention intervention**s for women with at least one identified baseline risk factor.
	
	Included interventions
	• Psychosocial
	• Pharmacological
	• Combined pharmacological and psychosocial
	• Care planning
	
	Excluded Interventions
	• Universal prevention programmes (that is, targeted to the general public or to a whole population group that has not been identified on the basis of increased risk) [NOTE. Include studies of interventions that were both universal/selective and indicated; and include studies which conducted a sub-group analysis of high-risk individuals].
	  • Single case study reports
	  • Studies including participants diagnosed with a current mental health problem (DSM or ICD criteria)
	  • Studies evaluating interventions involving the individualised clinical management or treatment of a mental health problem
	  • Studies evaluating the process of interventions rather than outcomes (for example, uptake of programme)

• **Comparison**	**Review question 2.1 & 2.2** • Treatment as usual, no treatment, waitlist control, attention control. • Another active prevention intervention
Critical Outcomes	**Maternal Outcomes** • Symptom-based o Diagnosis of mental disorder o Symptomatology (clinician- & self-report) o Relapse • Service utilisation o Hospitalisation for mental health problems o Retention in services (assessed through drop-out rates as a proxy measure) • Experience of care o Satisfaction o Acceptability of treatment (including drop-out as a proxy measure) • Quality of life o Quality of life measures o Functional disability o Social functioning o Perceived parenting stress o Disruption to mother & infant e.g. having to attend a clinic shortly after birth (versus home visits) • Harm o Side effects (including drop-out because of side effects) • Quality of mother-infant interaction and infant care o Quality of mother-infant interaction measures o Establishing or continuing breastfeeding **Fetal/Infant outcomes** • Fetal and infant physical development (including congenital malformations) • Side effects • Cognitive/emotional development of the infant • Prevention of neglect or abuse of the infant • Newborn toxicology • Service use o Planned (health visitor, vaccinations, well-baby check-ups) o Unplanned (A&E visits, inpatient, urgent or acute care) o Social service involvement
• Study design	**Review question 2.1 & 2.2** Systematic reviews of RCTs Primary RCTs

	Review question 2.3 N/A; GDG consensus-based
• Include unpublished data?	Yes but only where: • the evidence was accompanied by a study report containing sufficient detail to properly assess the quality of the data • the evidence was submitted with the understanding that data from the study and a summary of the study's characteristics will be published in the full guideline. Therefore, the GDG should not accept evidence submitted as commercial in confidence. However, the GDG should recognise that unpublished evidence submitted by investigators, might later be retracted by those investigators if the inclusion of such data would jeopardise publication of their research. Specific searches for grey literature will not be conducted.
• Restriction by date?	2006 to 7 April 2014
• Minimum sample size	No
• Study setting	Primary, secondary and tertiary healthcare services that are relevant to the NHS. This guideline will also be relevant to the work of, but will not provide specific recommendations to, NHS funded services (e.g. social services, or the non-statutory sector)
Search strategy	**Review question: 2.1,2.2,2.3** Study designs searched: RCTs, systematic reviews of RCTs Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA Date restrictions: 2006 to 7 April 2014
Searching other resources	Hand-reference searching of retrieved literature
The review strategy	The initial aim is to conduct a meta-analysis evaluating the clinical effectiveness of the interventions. However, high quality systematic reviews (e.g. Cochrane reviews) identified as part of the search can be utilised but will only be used if they meet the following criteria:- • Methodology of the review is deemed appropriate and is in keeping with guideline methods • PICO of the review is relevant to the guideline • There review is of a high quality without substantial errors that could have an impact on conclusions and guideline recommendations. We will search for RCTs conducted or published since the review was conducted, and the GDG will assess if any additional studies could affect the conclusions of the previous review. If new studies could change the conclusions, we will update the review and conduct a new analysis. If new studies could not change the conclusions of an existing review, the GDG will use the existing review to inform their recommendations. If GRADE assessments are unavailable, they will be generated In no reviews are found, we plan to compare all eligible interventions using pairwise meta-analyses. We will conduct pairwise analyses for

	all comparisons and outcomes using random effects models. For each study, we will also extract: year of study; country; total number of study participants in each included group; inclusion and exclusion criteria; age (mean); gender; race (percent white); and diagnosis. For each intervention or comparison group of interest, we will also extract: dose; frequency; duration of interventions. For all dichotomous outcomes a completer analysis will be used.

3. Case identification and assessment

Review question(s)	**Case Identification** 3.1 What concerns and behaviours (as expressed by the woman, carer and family, or exhibited by the woman) should prompt any professional who comes into contact with woman who is antenatal or postnatal to consider referral or further assessment for the presence of mental health problems? 3.2 What are the most appropriate methods/ instruments for the identification of mental health problems in women who are antenatal or postnatal? **Assessment** 3.3 For women who are antenatal or postnatal, what are the key components of, and the most appropriate structure for a comprehensive diagnostic assessment (including diagnosis)? Consider:- • the nature and content of the interview and observation • formal diagnostic methods/ psychological instruments for the assessment of core features mental health problems • the assessment of risk to self and others • the assessment of need of self and others • the setting(s) in which the assessment takes place • the role of the any informants • gathering of independent and accurate information from informants.
Sub-question(s)	Where possible, consideration should be given to the specific needs of:- • black and minority ethnic groups • socioeconomic groups • asylum seekers and refugees • women who are victims of trafficking • women with learning and physical disabilities • gypsies and travellers • women in prison

	Where possible, the review will conducted based on primary diagnosis of:- • depression • psychosis (including schizophrenia, schizoaffective disorder, postpartum psychosis and bipolar disorder) • anxiety disorders (including panic disorder, generalised anxiety disorder, obsessive-compulsive disorder, tokophobia, post-traumatic stress disorder) • personality disorders (including schizoid, avoidant, obsessive-compulsive, borderline, anti-social personality disorder) • substance misuse (including drugs and alcohol) • eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified, and binge eating) • sub-threshold disorders
Chapter	Chapter 6: Case identification and assessment
Objectives	• To identify brief case identification tools (<12 items) to assess need for further assessment of women with a suspected mental health problem. • To assess the diagnostic accuracy of brief case identification tools. • To identify the key components of a comprehensive diagnostic assessment. • To assess the diagnostic accuracy of assessment tools.
• **Population**	**Included** Women who are antenatal or postnatal (from delivery to the end of the first year)
• **Intervention**	**Review question 3.1** N/A **Review question 3.2** Brief case identification screening instruments (<12 items) considered appropriate and suitable for use **Review question 3.3** Assessment tools/methods considered appropriate and suitable for use
• **Comparison**	**Review question 3.1** N/A **Review question 3.2 & 3.3** Gold standard: Diagnosis Statistical manual (DSM-IV) or International Classification of Diseases (ICD-10) of mental health problems
Critical Outcomes	**Review question 3.1** N/A **Review question 3.2 & 3.3** **Sensitivity**: the proportion of true positives of all cases diagnosed with conduct disorder in the population **Specificity**: the proportion of true negatives of all cases not-diagnosed with conduct disorder in the population.
Important but not critical outcomes	**Review question 3.1** N/A **Review question 3.2 & 3.3** **Positive Predictive Value (PPV)**: the proportion of patients with positive test results who are correctly diagnosed. **Negative Predictive Value (NPV)**: the proportion of patients with negative test results who are correctly diagnosed. **Area under the Curve (AUC):** are constructed by plotting the true positive rate as a function of the false positive rate for each threshold.

• Study design	**Review question 3.1** N/A; GDG consensus-based **Review question 3.2 & 3.3** • Systematic reviews of RCTs • Primary RCTs • Cross-sectional (cohort and case control) studies
• Include unpublished data?	Yes but only where: • the evidence was accompanied by a study report containing sufficient detail to properly assess the quality of the data • the evidence was submitted with the understanding that data from the study and a summary of the study's characteristics will be published in the full guideline. Therefore, the GDG should not accept evidence submitted as commercial in confidence. However, the GDG should recognise that unpublished evidence submitted by investigators, might later be retracted by those investigators if the inclusion of such data would jeopardise publication of their research. Specific searches for grey literature will not be conducted.
• Restriction by date?	[Previous guideline searched risk of depression (1996 – 2006), other disorders (database inception to 2006)] Systematic reviews of RCTs, primary RCTs: 2006 to 7 April 2014 Cross-sectional (cohort and case control) studies: database inception to 7 April 2014
• Minimum sample size	No
• Study setting	Primary, secondary and tertiary healthcare services that are relevant to the NHS. This guideline will also be relevant to the work of, but will not provide specific recommendations to, NHS funded services (e.g. social services, or the non-statutory sector)
Search strategy	**Review question: 3.1,3.2,3.3** Study design searched: Systematic reviews of RCTs, primary RCTs Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA Date restrictions: 2006 to 7 April 2014 Study design searched: Cross sectional (cohort and case control studies)

	Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Date restrictions: Database inception to 7 April 2014
Searching other resources	Hand-reference searching of retrieved literature.
The review strategy	**Review question 3.2** • Pooled diagnostic accuracy meta-analyses on the sensitivity and specificity of specific brief case identification instruments for mental health disorders will be conducted (dependent on available data). • In the absence of adequate date, a narrative review of case identification instruments with be conducted and guided by a pre-defined list of consensus-based criteria (for example, the clinical utility of the tool, administrative characteristics, and psychometric data evaluating its sensitivity and specificity). **Review question 3.3** • For assessment, the GDG will use a consensus-based approach to identify the key components of an effective assessment.

4. Interventions for the treatment of mental health problems

Review question(s)	4.1 For women with mental disorders who are antenatal or postnatal, what are the benefits and/or potential harms of **psychosocial** interventions to treat mental health problems? 4.2 For women with mental disorders who are antenatal or postnatal, what are the benefits and/or potential harms of **pharmacological** interventions to treat mental health problems? 4.3 For women with mental disorders who are antenatal or postnatal, what are the benefits and/or potential harms of **combined pharmacological and psychosocial** treatment interventions to treat mental health problems? 4.4 For women with mental disorders who are antenatal or postnatal, what are the benefits and/or potential harms of **electroconvulsive therapy** to treat mental health problems? 4.5 For women with mental disorders who are antenatal or postnatal, what are the benefits and/or potential harms of interventions targeted at improving the **quality of the mother-child interaction?** 4.6 What is the role of the family, carers and peers in the treatment and support of women with mental health disorders in pregnancy and the postnatal period?
Sub-question(s)	Where possible, consideration should be given to the specific needs of:- • black and minority ethnic groups • socioeconomic groups • asylum seekers and refugees • women who are victims of trafficking • women with learning and physical disabilities • gypsies and travellers • women in prison Where possible, the review will conducted based on primary diagnosis of:- • depression • psychosis (including schizophrenia, schizoaffective disorder, postpartum psychosis and bipolar disorder) • anxiety disorders (including panic disorder, generalised anxiety disorder, obsessive-compulsive disorder, tokophobia, post-traumatic stress disorder) • personality disorders (including schizoid, avoidant, obsessive-compulsive, borderline, anti-social personality disorder) • substance misuse (including drugs and alcohol) • eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified, and binge eating) • sub-threshold disorders
Chapter	Chapter 10: Treatment interventions

Objectives	To evaluate the clinical effectiveness of interventions for the treatment of mental health problems for women in the antenatal and postnatal period.
• **Population**	**Included** Women who have mental health problems during the antenatal and postnatal period (from delivery to the end of the first year). Include:- • Women with sub-threshold symptoms (but no formal diagnosis of a mental health problem) • Women with a formal diagnosis of mild, moderate and severe disorders **Exclude women:-** • With no current diagnosis of a mental health problem • who are greater than one year into the postnatal period • who are not in the antenatal or postnatal period (up to one year postnatal)
• **Intervention**	• Psychological interventions • Support and education interventions • Pharmacological interventions • Combined psychological and pharmacological interventions • Electroconvulsive therapy • Interventions that address the mother-child interaction
• **Comparison**	Treatment as usual, no treatment, wait-list control, active control, other active interventions
Critical Outcomes	**Maternal Outcomes** • **Symptom-based** o Diagnosis of mental disorder o Symptomatology o Relapse o Use of drugs/alcohol • **Service utilisation** o Hospitalisation o Retention in services (assessed through drop-out rates as a proxy measure) o Health service utilisation (specify e.g. use of psychiatric services) • **Experience of care** o Satisfaction (validated measures only, specific items will not be analysed) o Acceptability of treatment (assessed through questioning or through including drop-out as a proxy measure) • **Quality of life** o Quality of life measures o Functional disability o Social functioning o Self-esteem o Perceived parenting stress o Maternal confidence

	○ Preservation of rights • **Harm** ○ Side effects (including drop-out because of side effects) ○ Maternal mortality and serious morbidity including self-harm and suicide attempts • **Quality of mother-infant interaction** ○ Quality of mother-infant interaction ○ Maternal attitude towards motherhood ○ Establishing or continuing breastfeeding **Infant outcomes (no restriction of length of follow-up)** • Foetal and infant physical development (including congenital malformations) • Side effects (especially of pharmacological interventions for the fetus and for the infant if breastfeeding) • Apgar score • Birth weight • Admission to neonatal intensive care unit • Cognitive/emotional development of the infant • Prevention of neglect or abuse of the infant • Foetal/infant mortality • Foetal/infant morbidity • Optimal care of infant (e.g. vaccinations, well-baby check-ups)
• Study design	**Review questions 4.1 to 4.6** Systematic reviews of RCTs Primary RCTs
• Include unpublished data?	Yes but only where: • the evidence was accompanied by a study report containing sufficient detail to properly assess the quality of the data • the evidence was submitted with the understanding that data from the study and a summary of the study's characteristics will be published in the full guideline. Therefore, the GDG should not accept evidence submitted as commercial in confidence. However, the GDG should recognise that unpublished evidence submitted by investigators, might later be retracted by those investigators if the inclusion of such data would jeopardise publication of their research. Specific searches for grey literature will not be conducted.
• Restriction by date?	**Review question: 4.1,4.2,4.3,4.4,4.5,4.6** Systematic reviews of RCTs, RCTs: 2006 to 7 April 2014 **Review question: 4.1** All study designs: database inception to 7 April 2014 **Review question: 4.2** Cross sectional studies (including cohort and case-control studies): database inception to 7 April 2014
• Minimum sample size	No
• Study setting	Primary, secondary and tertiary healthcare services that are relevant to the NHS. This guideline will also be relevant to the work of, but

	will not provide specific recommendations to, NHS funded services (e.g. social services, or the non-statutory sector)
Search strategy	**Review question: 4.1,4.2,4.3,4.4,4.5,4.6** Study designs searched: Systematic reviews of RCTs, RCTs Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA Date restrictions: 2006 to 7 April 2014 **Review question: 4.1** Study designs searched: All study designs Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA Date restrictions: Database inception to 7 April 2014 **Review question: 4.2** Study designs searched: Cross sectional studies (including cohort and case-control studies) Databases searched: General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO Date restrictions: Database inception to 7 April 2014
Searching other resources	Hand-reference searching of retrieved literature
The review strategy	The initial aim is to conduct a meta-analysis evaluating the clinical effectiveness of the interventions. However, high quality systematic reviews (e.g. Cochrane reviews) identified as part of the search can be utilised but will only be used if they meet the following criteria:- • Methodology of the review is deemed appropriate and is in keeping with guideline methods • PICO of the review is relevant to the guideline • There review is of a high quality without substantial errors that could have an impact on conclusions and guideline recommendations.

	We will search for RCTs conducted or published since the review was conducted, and the GDG will assess if any additional studies could affect the conclusions of the previous review. If new studies could change the conclusions, we will update the review and conduct a new analysis. If new studies could not change the conclusions of an existing review, the GDG will use the existing review to inform their recommendations. If GRADE assessments are unavailable, they will be generated. In no reviews are found, we plan to compare all eligible interventions using pairwise meta-analyses. We will conduct pairwise analyses for all comparisons and outcomes using random effects models. For each study, we will also extract: year of study; country; total number of study participants in each included group; inclusion and exclusion criteria; age (mean); gender; race (percent white); and diagnosis. For each intervention or comparison group of interest, we will also extract: dose; frequency; duration of interventions. We will use both an intention to treat analysis and a completer analysis for dichotomous outcomes.