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Appendix 23: 2007 Methods chapter

Appendix 24: 2007 Health economic evidence on mother and baby units

Appendix 25: 2007 Survey of antenatal and postnatal mental health primary care services in England and Wales - questionnaire

Appendix 26: 2007 Results of survey of antenatal and postnatal mental health primary care services in England and Wales - questionnaire

APPENDIX 1: SCOPE FOR THE DEVELOPMENT OF THE CLINICAL GUIDELINE

1 GUIDELINE TITLE

Antenatal and postnatal mental health: clinical management and service guidance

1.1 *Short title*

Antenatal and postnatal mental health (update)

2 THE REMIT

This is a partial update of *Antenatal and Postnatal Mental Health* (NICE clinical guideline 45). We will also carry out an editorial review of all recommendations to ensure that they comply with NICE's duties under equalities legislation.

This update is being undertaken as part of the guideline review cycle.

3 CLINICAL NEED FOR THE GUIDELINE

3.1 *Epidemiology*

- a) Women in the antenatal and postnatal period are vulnerable to the same mental health disorders as other adults. Pregnancy is not protective and affects the probability of relapse, particularly if women discontinue medication. There is a high risk of puerperal psychosis postpartum in women with bipolar disorder and women with a history of puerperal psychosis.
- b) The management of mental health disorders in the antenatal and postnatal periods can differ from management of mental health disorders in adults at other times. This is because of:
 - the impact of abruptly stopping medication
 - the increased risk of developing an episode of a psychotic disorder in the postpartum period
 - the rapid onset and severity of puerperal psychosis
 - the risk–benefit ratio of psychotropic drugs during pregnancy and breastfeeding
 - the impact of illness on the developing fetus and baby.¹
- c) There is concern that misuse of the term 'postnatal depression' to describe any mental health disorder occurring in the postnatal period has led to a failure to identify other mental health disorders that occur at this time. In addition to depression and psychosis, anxiety disorders, substance misuse and eating disorders can also occur in the postnatal and antenatal periods.

¹ In this document 'baby' refers to single and multiple births.

- d) At least half of women who have a baby experience low mood, either at some point in their pregnancy, or in the initial days or weeks following the birth. Symptoms include feeling tearful, overwhelmed and irritable, but these usually pass with rest, support and reassurance.
- e) If low mood persists during pregnancy, a diagnosis of antenatal depression may be appropriate. Antenatal depression is thought to affect around 12% of pregnant women, which is similar to the prevalence of postnatal depression. However, despite high prevalence rates, antenatal depression and anxiety disorders are often a neglected aspect of pregnancy. Early detection, assessment and management could prevent the development of postnatal problems and improve the mother's quality of life during pregnancy.
- f) If, during the postnatal period, low mood persists or occurs for the first time (de novo cases), the mother may be diagnosed with postnatal depression. Diagnostic features include:
- irritability
 - difficulty sleeping even when the baby is sleeping
 - lack of appetite
 - anxiety
 - poor mother–infant interaction (for example, lack of interest in the child or lack of sensitivity to the infant's needs)
 - anxieties about the child
 - thoughts of harming the child
 - lack of motivation or enjoyment
 - panic attacks
 - feelings of isolation
 - a sense of being overwhelmed
 - physical signs of tension such as headaches or gastrointestinal symptoms.
- Thoughts of self-harm and suicide can also be present, and these may or may not lead to self-harming behaviour.
- g) Anxiety disorders, characterised by abnormal or inappropriate anxiety, occur on their own but can also occur with depressive disorders. Anxiety disorders can include panic disorder, generalised anxiety disorder, obsessive-compulsive disorder, tokophobia (fear of childbirth or pregnancy) and post-traumatic stress disorder. Prevalence rates vary according to the type of anxiety disorder.
- h) A personality disorder causes persistent difficulties in the way a person manages their day-to-day life and interacts with others. Approximately 3% of women in the UK are thought to have a personality disorder: the most prevalent are schizoid personality disorder, avoidant personality disorder, obsessive-compulsive personality disorder and

borderline personality disorder. Pregnancy and childbirth in women with personality disorders (particularly borderline personality disorder) can evoke many issues relating to trauma in their past, which in turn can affect their ability to cope with being a mother and caring for their baby.

- i) A more severe illness, with acute onset, is puerperal psychosis, a relatively rare disorder characterised by psychotic depression, mania or atypical psychosis. It affects between 1 and 2 in every 1000 women who give birth. Characteristic features in those with mania include excitability, disinhibition and intense over-activity. Pregnancy, childbirth and the postnatal period can be associated with the re-emergence or exacerbation of a previous psychotic illness, such as schizophrenia, schizoaffective disorder or bipolar disorder. For some women, there can be an increased risk of danger to themselves or others, including the baby.
- j) Changes to body shape, including weight gain, during pregnancy and the postnatal period can be of particular concern to women with an eating disorder. Eating disorders are characterised by significant disturbances in normal eating patterns, body image and normal weight gain. They include anorexia nervosa, bulimia nervosa and eating disorders not otherwise specified, including binge eating disorder. The prevalence of eating disorders in the general population is approximately 4%. The prevalence of anorexia nervosa and bulimia nervosa during pregnancy is lower than at other times, but pregnant women with a history of an eating disorder can have some subthreshold eating disorder symptoms.
- k) The misuse of drugs, alcohol and nicotine during pregnancy is thought to be common: 15% of pregnant women in inner cities screen positive for drug use, most of which is cannabis; 10% of pregnant women binge drink; and 13% of pregnant women smoke throughout pregnancy (self-reported data collected at delivery). The misuse of drugs and alcohol during pregnancy is known to have significant harmful effects on pregnancy and infant outcomes.. Complications during pregnancy, for example prematurity, intrauterine growth retardation and fetal distress, are more common in women who misuse drugs than those who do not. Drug misuse in pregnancy can also result in neonatal abstinence syndrome and negative effects on the growth and development of the infant.
- l) Mental health disorders during pregnancy and the postnatal period can be associated with, or aggravated by, a number of factors, including:
 - psychosocial factors, such as the demands and expectations of being a mother in addition to the psychological effects of a traumatic delivery
 - social factors, including social isolation, economic status, ethnicity, cultural issues and housing
 - family factors, including the relationship with the baby's father and the support received from family and friends

- biological factors, including genetic factors and the hormonal changes that occur during pregnancy, childbirth and following childbirth
 - personal history (including lifestyle factors, domestic violence, childhood sexual and physical abuse, past psychiatric history and previous maternal history) and family history
 - stillbirth
 - the infant's general health
 - admission of the infant to neonatal care.
- m) The UK Confidential Enquiry into Maternal Deaths (CMACE) reports that between 2006 and 2008 there were 1.27 deaths per 100,000 maternal deliveries in the UK as a result of psychiatric disorders. Although response to treatment is good, mental health disorders can go unrecognised and untreated in pregnancy and postpartum. If untreated, women can continue to have symptoms, sometimes for many years, with the negative impact affecting not only the mother, but also other family members.
- n) All mental health disorders in the antenatal and postnatal period can have a significant effect on the mother-infant relationship, and as a result, there may be longer-term consequences for all areas of the infant's development.

3.2 *Current practice*

- a) Women with antenatal and postnatal mental health disorders are treated in a variety of NHS settings, including primary care services, obstetric and gynaecological services, general mental health services and specialist secondary care mental health services. Most mental health disorders that arise during pregnancy and the postnatal period will be mild to moderate, and treated and managed in primary care.
- b) The provision and uptake of services varies across England and Wales. In part this reflects variation in the recognition of disorders, but also the presence or absence of specialist multidisciplinary and multi-agency services, particularly for women with more severe illness.

4 THE GUIDELINE

The guideline development process is described in detail on the NICE website (see section 6, 'Further information').

This scope defines what the guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health.

The areas that will be addressed by the guideline are described in the following sections.

4.1 Population

4.1.1 Groups that will be covered

- a) Women who have, or are at risk of, mental health disorders during pregnancy and the postnatal period (from delivery to the end of the first year). This will include women with subthreshold symptoms and women with mild, moderate and severe disorders.
- b) Specific consideration will be given to the needs of black and minority ethnic groups, socioeconomic groups, asylum seekers, women who are victims of trafficking, and women with learning and physical disabilities.

4.2 Healthcare setting

- a) Care and shared care provided in primary, secondary and tertiary healthcare services in the NHS and NHS provided and funded services, including care provided by healthcare professionals and others working in healthcare settings, who have contact with, and make decisions concerning, the mental healthcare of women in pregnancy and the postnatal period. This update covers the same healthcare settings as the original NICE guideline (CG45).

4.3 Clinical management

4.3.1 Key clinical issues that will be covered

- a) The prevention of mental health disorders in pregnancy and the postnatal period.
- b) Case identification, diagnosis and assessment of mental health disorders in women during pregnancy and the postnatal period.
- c) Psychosocial interventions (including type, form and duration) and the balance of risk and benefit for the mother, fetus and baby.
- d) Pharmacological interventions (including type, dose and duration) and the balance of risk and benefit for the mother, fetus and baby.

Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only if clearly supported by evidence, use outside a licensed indication may be recommended. The guideline will assume that prescribers will use a drug's summary of product characteristics to inform decisions made with individual patients.

- e) Appropriate use of combined pharmacological and psychosocial treatments.
- f) Electroconvulsive therapy.

- g) 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.
- h) Identification and management of risk to self, baby and others, including physical, sexual and emotional abuse such as neglect
- i) The impact of the mother's mental health on the quality of the mother-baby interaction.

4.3.2 Clinical issues that will not be covered

Areas not covered by the original guideline or the update:

- a) The needs of infants, other children and partners of women who have developed mental health disorders in pregnancy and the postnatal period.
- b) Consideration of the need for specialist inpatient services (for example, mother and baby units).

Areas from the original guideline that will not be updated:

- a) Configuration of services for the provision of effective care for women and their children.

4.4 Main outcomes

- a) Diagnosis of a mental disorder
- b) Symptomatology
- c) Quality of life
- d) Relapse
- e) Hospitalisation
- f) Drop-out (including all cause and drop-out because of side effects)
- g) Side effects
- h) Quality of mother-infant interaction and infant care
- i) Fetal and infant development, including congenital malformations.

4.5 Review questions

Review questions guide a systematic review of the literature. They address only the key clinical issues covered in the scope, and usually relate to interventions, diagnosis, prognosis, service delivery or patient experience.

4.5.1 Prediction, identification and assessment of mental health disorders during pregnancy and the postnatal period

- a) What instruments and psychosocial factors reliably predict the development or recurrence of mental health disorders in women during pregnancy and the postnatal period²?

Subsidiary questions, repeat for:

- depression
- puerperal psychosis (including schizophrenia, schizoaffective disorder 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)
- substance misuse (including drugs, alcohol and nicotine)
- eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified).

- b) Does the benefit of using these instruments and/or considering these psychological factors outweigh the harm?

- c) What instruments have been developed that reliably detect the presence of mental health disorders in women during pregnancy and the postnatal period?

Subsidiary questions, repeat for:

- Depression
- puerperal psychosis (including schizophrenia, schizoaffective disorder 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)
- substance misuse (including drugs, alcohol and nicotine)
- eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified).

- d) Does the benefit of using these instruments and/or considering these psychosocial factors outweigh the harm?

² Postnatal period defined as from delivery to the end of the first year.

- e) What instruments and/or methods have been developed that reliably assess mental health disorders in women during the antenatal and postnatal period?

Subsidiary questions, repeat for:

- depression
 - puerperal psychosis (including schizophrenia, schizoaffective disorder 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)
 - substance misuse (including drugs, alcohol and nicotine)
 - eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified).
- f) Does the benefit of using these instruments and/or considering these psychosocial factors outweigh the harm?

4.5.2 Prevention

- a) For women identified as being at risk of developing a mental health disorder during pregnancy and in the postnatal period, what interventions are most effective in reducing that risk?

Subsidiary questions, repeat for:

- depression
- puerperal psychosis (including schizophrenia, schizoaffective disorder 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)
- substance misuse (including drugs, alcohol and nicotine)
- eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified).

Subsidiary questions, repeat for:

- psychosocial interventions
- pharmacological interventions
- ECT
- combined interventions.

4.5.3 Treatment

- a) For women with mental health disorders during pregnancy and the postnatal period, what interventions are associated with a reduction in symptomatology, improved quality of life and increased remission rates?

Subsidiary questions, repeat for:

- depression
- puerperal psychosis (including schizophrenia, schizoaffective disorder 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)
- substance misuse (including drugs, alcohol and nicotine)
- eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified).

Subsidiary questions, repeat for:

- psychosocial interventions
- pharmacological interventions
- ECT
- combined interventions.

- b) For women with mental health disorders during pregnancy and the postnatal period, what interventions are associated with an increase in harm to the mother, fetus or baby (measures might include relapse, hospitalisation, increased attrition or side effects)?

Subsidiary questions, repeat for:

- depression
- puerperal psychosis (including schizophrenia, schizoaffective disorder 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)
- substance misuse (including drugs, alcohol and nicotine)
- eating disorders (including anorexia nervosa, bulimia nervosa, eating disorders not otherwise specified).

Subsidiary questions, repeat for:

- psychosocial interventions
- pharmacological interventions

- ECT
 - combined interventions.
- c) For women with mental health disorders during pregnancy and the postnatal period, what interventions (beyond those targeting the mental health disorder) help to improve the quality of the mother–infant interaction?

4.6 *Economic aspects*

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in 'The guidelines manual' (see 'Further information').

4.7 *Status*

4.7.1 *Scope*

This is the final scope.

4.7.2 *Timing*

The development of the guideline recommendations will begin in March 2013.

5 RELATED NICE GUIDANCE

5.1 *Published guidance*

5.1.1 *NICE guidance to be updated*

This guideline will partially update and will replace the following NICE guidance: Antenatal and postnatal mental health. NICE clinical guideline 45 (2007).

5.1.2 *Other related NICE guidance*

- Patient experience in adult NHS services. NICE clinical guidance 138 (2012)
- Antenatal care. NICE clinical guideline. Publication expected September 2012.
- Antenatal care. NICE quality standard 22 (2012).
- Service user experience in adult mental health. NICE clinical guidance 136 (2011)
- Caesarean section. NICE clinical guideline 132 (2011)
- Multiple pregnancy. NICE clinical guideline 129 (2011)
- Common mental health disorders. NICE clinical guideline 123 (2011)

- Alcohol dependence and harmful alcohol use. NICE clinical guideline 115 (2011)
- Alcohol dependence and harmful alcohol use. NICE quality standard 11 (2011)
- Anxiety. NICE clinical guideline 113 (2011)
- Aripiprazole for the treatment of schizophrenia in people aged 15 to 17 years. NICE technology appraisal guidance 213 (2011)
- Pregnancy and complex social factors. NICE clinical guideline 110 (2010)
- Hypertension in pregnancy. NICE clinical guideline 107 (2011)
- Weight management before, during and after pregnancy. NICE public health guidance 27 (2010)
- Quitting smoking in pregnancy and following childbirth. NICE public health guidance 26 (2010)
- Alcohol-use disorders: physical complications. NICE clinical guideline 100 (2010)
- Depression in adults. NICE clinical guideline 90 (2009)
- When to suspect child maltreatment. NICE clinical guideline 89 (2009)
- Schizophrenia. NICE clinical guideline 82 (2009)
- Borderline personality disorder. NICE clinical guideline 78 (2009)
- Antisocial personality disorder. NICE clinical guideline 77 (2009)
- Diabetes in pregnancy. NICE clinical guideline 63 (2008)
- Antenatal care. NICE clinical guideline 62 (2008).
- Maternal and child nutrition. NICE public health guidance 11 (2008)
- Intrapartum care. NICE clinical guideline 55 (2007)
- Drug misuse: psychosocial interventions. NICE clinical guideline 51 (2007)
- Computerised cognitive behaviour therapy for depression and anxiety. NICE technology appraisal guidance 97 (2006)
- Bipolar disorder. NICE clinical guideline 38 (2006)
- Postnatal care. NICE guideline 37 (2006).
- Eating disorders. NICE clinical guideline 9 (2004)
- Guidance on the use of electroconvulsive therapy. NICE technology appraisal guidance 59 (2003)

5.1.3 Guidelines under development

NICE is currently developing the following related guidance (details available from the NICE website):

- Diabetes in pregnancy (update). NICE clinical guideline. Publication expected June 2014.
- Psychosis and schizophrenia (update). NICE clinical guideline. Publication expected February 2014.
- Bipolar disorder (update). NICE clinical guideline. Publication expected June 2014.
- Offenders: prevention and early treatment of mental health problems. NICE public health guidance. Publication date to be confirmed.

6 FURTHER INFORMATION

Information on the guideline development process is provided in:

- How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS
- The guidelines manual
- Developing NICE quality standards: interim process guide.

Information on the progress of the guideline and quality standards is also available from the [NICE website](#).

APPENDIX 2: DECLARATIONS OF INTERESTS BY GUIDELINE DEVELOPMENT GROUP MEMBERS

With a range of practical experience relevant to APMH (Update) the GDG, members were appointed because of their understanding and expertise in healthcare for people with APMH and support for their families/ carers, including: scientific issues; health research; the delivery and receipt of healthcare, along with the work of the healthcare industry; and the role of professional organisations and organisations for people with APMH and their families/ carers.

To minimise and manage any potential conflicts of interest, and to avoid any public concern that commercial or other financial interests have affected the work of the GDG and influenced guidance, members of the GDG must declare as a matter of public record any interests held by themselves or their families which fall under specified categories (see below). These categories include any relationships they have with the healthcare industries, professional organisations and organisations for people with APMH and their families/ carers.

Individuals invited to join the GDG were asked to declare their interests before being appointed. To allow the management of any potential conflicts of interest that might arise during the development of the guideline, GDG members were also asked to declare their interests at each GDG meeting throughout the guideline development process. The interests of all the members of the GDG are listed below, including interests declared prior to appointment and during the guideline development process.

Categories of interest to be written in third person

Paid employment

Personal pecuniary interest: financial payments or other benefits from either the manufacturer or the owner of the product or service under consideration in this guideline, or the industry or sector from which the product or service comes. This includes holding a directorship or other paid position; carrying out consultancy or fee paid work; having shareholdings or other beneficial interests; receiving expenses and hospitality over and above what would be reasonably expected to attend meetings and conferences.

Personal family interest: financial payments or other benefits from the healthcare industry that were received by a member of your family.

Non-personal pecuniary interest: financial payments or other benefits received by the GDG member's organisation or department, but where the GDG member has not personally received payment, including fellowships and other support provided by the healthcare industry. This includes a grant or fellowship or other payment to

sponsor a post, or contribute to the running costs of the department; commissioning of research or other work; contracts with, or grants from, NICE.

Personal non-pecuniary interest: these include, but are not limited to, clear opinions or public statements you have made about individuals with APMH, holding office in a professional organisation or advocacy group with a direct interest in APMH, other reputational risks relevant to APMH.

Guideline Development Group - declarations of interest	
Employment	<p>Professor in Women’s Mental Health, Health Service and Population Research Department, Institute of Psychiatry, King’s College London & Hon. Consultant Perinatal Psychiatrist, South London & Maudsley Foundation NHS Trust;</p> <p>Head of Section of Women’s Mental Health and Women’s Mental Health Lead for Women’s Health Academic Centre, KCL.</p>
Personal pecuniary interest	I have been given AstraZeneca shares which have been sold with proceeds being given to charity
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Non-personal non-pecuniary interest	<ol style="list-style-type: none"> 1. NIHR Research Professorship £1,080,000 (2013-18) 2. NIHR Programme Grant for Applied Research RP-DG-1108-10012. The Effectiveness and Cost-effectiveness of Perinatal Psychiatry Services (ESMI). £2,000,000. (2-13-8) 3. Medical Research Council /Medical Research Foundation. The neurobiological basis of puerperal psychosis: how multiple biological symptoms interact with vulnerability. (2013-6) £239,164.61. PI: Paola Dazzan. 4. NIHR sBRC-Mental Health. Antipsychotics in pregnancy. (2013-4) £44,129. 5. Tommys the Baby Charity (through a corporate social responsibility grant from Johnson and Johnson) (2012-3) £50,000 6. NIHR Policy Research Programme. PR-IP-06-11-10011. £449 990. (2012-2015) Optimising identification, referral and care of trafficked people within the NHS. Joint lead applicant with Cathy Zimmerman (LSHTM); Co-applicants: N Stanley, D Bick, R French, S Oram, M Abas. 7. NIHR Programme Grant for Applied Research. RP-PG-0108-10084. Improving the healthcare response to domestic violence (London PI - £165,469 IoP). (2010-2015) £1,800,000. G Feder (Chief Investigator) 8. Department of Health Voluntary Sector Investment Programme. Innovation, Excellence and Strategic Development Fund. Promoting recovery: improving mental health service responses to violence against women (2013-14). £73,929.35 (to IoP). PI: Sian Oram. Partnership grant with AVA (NGO) to evaluate their programme

	<p>9. King's Policy Institute. At what cost? Meeting the Mental Health needs of People who have been Trafficked (2013-4). £9,334.72. PI: Sian Oram.</p> <p>10. NIHR Research Professorship on antipsychotic in pregnancy £1,499,280.00 (2013-18)</p> <p>11. NIHR Programme Grant for Applied Research RP-DG-1108-10012. The Effectiveness and Cost-effectiveness of Perinatal Psychiatry Services (ESMI). £2,000,020.00</p> <p>12. NIHR sBRC-Mental Health. Antipsychotics in pregnancy. (2013-4) £ 44,129.</p> <p>13. NIHR PRP. PR-IP-06-11-10011. £449 990. (2012-2015) Optimising identification, referral and care of trafficked people within the NHS.</p> <p>14. NIHR Programme Grant for Applied Research. RP-PG-0108-10084. Improving the healthcare response to domestic violence</p> <p>15. Tommy's the Baby Charity (through support from Johnson& Johnson). £50,000. (2012-3) Antipsychotics in pregnancy.</p> <p>Active - co-applicant status</p> <p>1. Medical Research Council /Medical Research Foundation. The neurobiological basis of puerperal psychosis: how multiple biological symptoms interact with vulnerability. (2013-6) £239,164.61.</p>
Action taken	None
Helen Adams	
Employment	Commissioning Manager - Children & Young People Nene & Corby CCG
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Non-personal non-pecuniary interest	None
Action taken	None
Jane Barlow	
Employment	Professor of Public Health in the Early Years
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action taken	None
Maria Bavetta	
Employment	Service user representative
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	Co-founder of, Maternal OCD, is a member of the Maternal Mental Health Alliance (MMHA). The MMHA

	<p>have just been awarded £250,141 from Comic Relief – I will not personally be in receipt of any of this income.</p> <p>Contribution to core costs and project costs for Maternal OCD – the charitable trust which has provided this has asked to remain anonymous</p>
Personal non-pecuniary interest	None
Action taken	None
Sonji Clarke	
Employment	Senior Consultant in Gynaecology and Obstetrics at Guy's and St Thomas' Hospital
Personal pecuniary interest	Director of Health Solutions Company AristocHealth, which provides non specific health related consultancy, ranging from external risk reviews for Women's Health in NHS Hospital Trusts , to PHSE education for Year 6 primary school students around sexual health. There is nothing related to psychological health.
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action taken	None
Asha Day	
Employment	Health Visitor (East Midlands)
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action taken	None
Jill Demilew	
Employment	Consultant Midwife, King's College Hospital NHS Foundation Trust
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action taken	None
Karen Grayson	
Employment	Service user representative
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	On the Board of an advocacy group with a direct interest in the matter under consideration – Wish (voice for women's mental health). Wish provides advocacy for women with mental health issues in secure units and prisons.
Action taken	None
Alain Gregoire	
Employment	Consultant Psychiatrist/Lead Clinician, Perinatal Mental Health Service, Southern Health NHS Trust Honorary Senior Lecturer in Psychiatry, University of Southampton

Declarations of interests by Guideline Development Group members

	Clinical Advisor for Mental Health and Learning Disability, South Central SHA (NHS South of England) Chair, South of England Perinatal Mental Health Network
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action taken	None
Ian Jones	
Employment	Reader in Perinatal Psychiatry and Honorary Consultant Perinatal Psychiatrist
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	Vice Chair of the Perinatal Section of the Royal College of Psychiatrists Chair of Action on Postpartum Psychosis Was the Chair of the Uk and Ireland Marcé Society and member of the international Marcé Society executive. Received research and other funding from Wellcome Trust, MRC, Stanley Foundation, BOHRF, NISCHR, Wales Government, Big Lottery, Comic Relief Director of Bipolar Education Cymru (BEP-C) and received funding from the Big Lottery to develop and deliver group and on-line psychoeducation interventions Director of the National Center for Mental Health – a biomedical research centre funded by the NISCHR (Welsh Government) Received funding from the Welsh Government to produce an on-line training module in perinatal mental health for Midwives Delivers the British Association of Psychopharmacology “Masterclass” on Perinatal Disorders and lead on the On-Line “Masterclass Although he has not received honoraria in the last three years he has previously received honoraria from Lilly, GlaxoSmithKline, Lundbeck, Jansen and AstraZeneca to give talks on Psychoeducation and his research on perinatal mood disorders
Action taken	None
Liz McDonald	
Employment	Consultant Perinatal Psychiatrist in East London Foundation Trust
Personal pecuniary interest	None

Personal family interest	Paul Clifford (husband), is managing director of a company (FACE) which supplies assessment tools and software to the NHS, including mental health services.
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action taken	None
Kirstie McKenzie-McHarg	
Employment	Consultant Clinical Psychologist, Head of Perinatal Psychology Service, Dept of Clinical Health Psychology, Warwick Hospital
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	Expert advisor to the Tommy's resource on Maternal Mental Health Secretary of the Faculty of Perinatal Psychology Member of the Maternal Mental Health Alliance, representing the British Psychological Society, and the Faculty of Perinatal Psychology within the BPS Co-founder of the International Network on Research into Perinatal PTSD
Action taken	None
Heather O'Mahen	
Employment	Senior Lecturer, School of Psychology, University of Exeter, Exeter, UK
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	In perinatal depression specifically – funding: <ul style="list-style-type: none"> - NIHR PENCLAHRC – Netmums: Online Behavioral Activation for Postnatal Depression. Awarded May 2011. Principle Investigator. Total costs =£60,000. - NIHR rfpb PB-PG-1112-29054 – Adapting and testing a brief intervention to reduce maternal anxiety during pregnancy. Paul Ramchandani, PI. In depression generally – funding <ul style="list-style-type: none"> - NIHR Health Technology Assessment – COBRA: Cost and Outcome of Behavioural Activation – Multi-centre Randomised Controlled Trial for Depression. Co-investigator. Awarded April 2012. Dave Richards, PI. Total costs =£1,700,000 - Medical Research Council Efficacy and Mechanism Evaluation – “Dialectical Behaviour Therapy (DBT) for Treatment-Resistant Depression (TRD): A Randomised Controlled Trial (RCT)” Co-investigator. Awarded November, 2011. Tom Lynch PI. Total costs =£2,100,000.
Personal non-pecuniary interest	Member: Devon Perinatal Mental health pathway member.

Declarations of interests by Guideline Development Group members

	Senior Lecturer Mood Disorders Centre – research interests in trials/ psychosocial treatments for perinatal mental health. Collaboration with Netmums.com
Action Taken	None
Sally Russell	
Employment	Director of Netmums
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	Netmums has been involved in the development of an online course which may be discussed as a treatment option.
Personal non-pecuniary interest	None
Action taken	None
Judith Mary Shakespeare	
Employment	Retired GP
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	<p>A member of the Maternal Mental Health Alliance and has been part of a sub-group that has raised £50,000 for Comic Relief to lobby for improved services for perinatal mental health problems.</p> <p>Has been on the Confidential Enquiry into maternal deaths and has reviewed notes and written 2 chapters about the issues for primary care in the last 2 reports (2003-5 and 2006-8). Is currently one of the collaborators in MBBRRACE-UK, the organisation that are continuing the maternal and neonatal death enquiries.</p> <p>I have been appointed as RCGP Clinical Champion for perinatal mental health starting 1/4/14. There is no pay for this work although travel expenses are paid.</p> <p>I have been involved with several others, including some GDG members, in writing a letter to the RCGP asking them to consider the errors in fact about maternal mental health that appear in the publication “Emma’s Diary” that the RCGP supports.</p>
Action taken	None

Special advisors

Ron Gray	
Employment	Senior Clinical Research Fellow and Consultant Clinical Epidemiologist, National Perinatal Epidemiology Unit, University of Oxford. Honorary Consultant in Public Health, Oxfordshire Primary Care Trust.
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	Conducted research into the effects of alcohol on the fetus and has expressed the view publicly that, given the uncertainties involved, women are best advised to avoid alcohol during pregnancy (effectively endorsing the advice from the CMO on this matter).
Action taken	None
Anne Lingford-Hughes	
Employment	Professor of Addiction Biology at Imperial College Consultant Psychiatrist with a particular interest in pharmacological treatments of alcohol problems and comorbidity at Central North West London NHS Foundation Trust.
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action taken	None
Nadia Micali	
Employment	NIHR Clinician scientist (Senior Lecturer), Behavioural and Brain Sciences Unit, UCL Institute of Child Health, London, UK Honorary Consultant Psychiatrist, Great Ormond Street Hospital, London, UK
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action taken	None
Anne Oxley	
Employment	Team Manager, Perinatal Mental Health Services, Northumberland, Tyne & Wear NHS Trust
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action taken	None

NCCMH Staff

Steven Pilling	
Employment	Director
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	Medical Research Council, research funding looking at psilocybin. Grant from NARSAD to look at transcranial direct current stimulation in treatment of depression.
Personal non-pecuniary interest	None
Action taken	None
Toshi Baba	
Employment	Honorary Research Associate, UCL
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action Taken	None
Odette Megnin-Viggars	
Employment	Systematic Reviewer (from February–December 2014)
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Maryla Moulin	
Employment	Project Manager
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action Taken	None
Eric Slade	
Employment	Health Economist
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action Taken	None
Sarah Stockton	
Employment	Senior Information Scientist
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action Taken	None

Declarations of interests by Guideline Development Group members

Iona Symington	
Employment	Research Assistant
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action Taken	None
Clare Taylor	
Employment	Senior Editor
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action Taken	None
Amina Udechuku	
Employment	Systematic Reviewer (from January 2013- February 2014)
Personal pecuniary interest	None
Personal family interest	None
Non-personal pecuniary interest	None
Personal non-pecuniary interest	None
Action Taken	None

APPENDIX 3: SPECIAL ADVISORS TO THE GUIDELINE DEVELOPMENT GROUP

Dr Ron Gray

Senior Clinical Research Fellow and Consultant Clinical Epidemiologist, National Perinatal Epidemiology Unit, University of Oxford.

Honorary Consultant in Public Health, Oxfordshire Primary Care Trust.

Professor Anne Lingford-Hughes

Professor of Addiction Biology at Imperial College

Consultant Psychiatrist with a particular interest in pharmacological treatments of alcohol problems and comorbidity at Central North West London NHS Foundation Trust.

Dr Nadia Micali

NIHR Clinician scientist (Senior Lecturer), Behavioural and Brain Sciences Unit, UCL Institute of Child Health, London, UK

Honorary Consultant Psychiatrist, Great Ormond Street Hospital, London, UK

Ms Ann Oxley

Team Manager, Perinatal Mental Health Services, Northumberland, Tyne & Wear NHS Trust

APPENDIX 4: STAKEHOLDERS WHO RESPONDED TO EARLY REQUESTS FOR EVIDENCE

Professor Marie-Paule Austin

Professor Jonathan Hill

Dr Think Nguyen

Mr Jon Shute

Ms Jan Parker

Health and Social Care Information Centre

Stillbirth and Neonatal Death Charity

APPENDIX 5: RESEARCHERS CONTACTED TO REQUEST FURTHER INFORMATION FROM PUBLISHED STUDIES

Massimo Ammaniti	Doris Rubio
Marcela Aracena	Terhi Saisto
Karen Armstrong	Michael Silverstein
Marie-Paule Austin	Alan Stein
Allison Barlow	Atsuko Tamaki
Jane Barlow	Ayfer Tezel
Beth Barnet	Kiara Timpano
Anne Bartu	Turkan Turan
Rebecca Bernard	Corinne Urech
Hyun Ju Cho	Jane Weaver / Jessica Lainchbury
Kathy Crockett	Ingela Wiklund
Mary Ann Curry	Caron Zlotnick
Deborah DaCosta	
Amanda Daley	
Orna Diav-Citrin	
Anne Duggan	
Erika Eros/ Andrew Czeizel	
Tiffany Field	
David Forman	
Jessica Gibson	
Vivette Glover	
Sophie Grigoriadis	
Nancy Grote	
Christopher Heinicke	
Marinus Van IJzendoorn	
Kathryn Kershaw	
Hui-Ling Laia	
Rachel Manber	
Maureen Marcenko	
Diane Mckee	
Elaine Meyer	
Jeannette Milgrom/ Alan Gemmill	
Ricardo Munoz	
Carol Newnham	
Susan Priesst	
Steven Ondersma	
Marguerite Reid	
Judith Ritcher	
Graciela Rojas	
Lee Anne Roman	

APPENDIX 6: EXPERT REVIEWERS WHO SUBMITTED COMMENTS IN RESPONSE TO THE CONSULTATION DRAFT OF THE GUIDELINE

Dr Roch Cantwell

Consultant Perinatal Psychiatrist, Southern General Hospital, Glasgow.

Dr Ron Gray

Senior Clinical Research Fellow and Consultant Clinical Epidemiologist, National Perinatal Epidemiology Unit, University of Oxford.

Honorary Consultant in Public Health, Oxfordshire Primary Care Trust.

Dr Nadia Micali

NIHR Clinician scientist (Senior Lecturer), Behavioural and Brain Sciences Unit, UCL Institute of Child Health, London, UK.

Honorary Consultant Psychiatrist, Great Ormond Street Hospital, London.

Geraldine Scott-Heyes

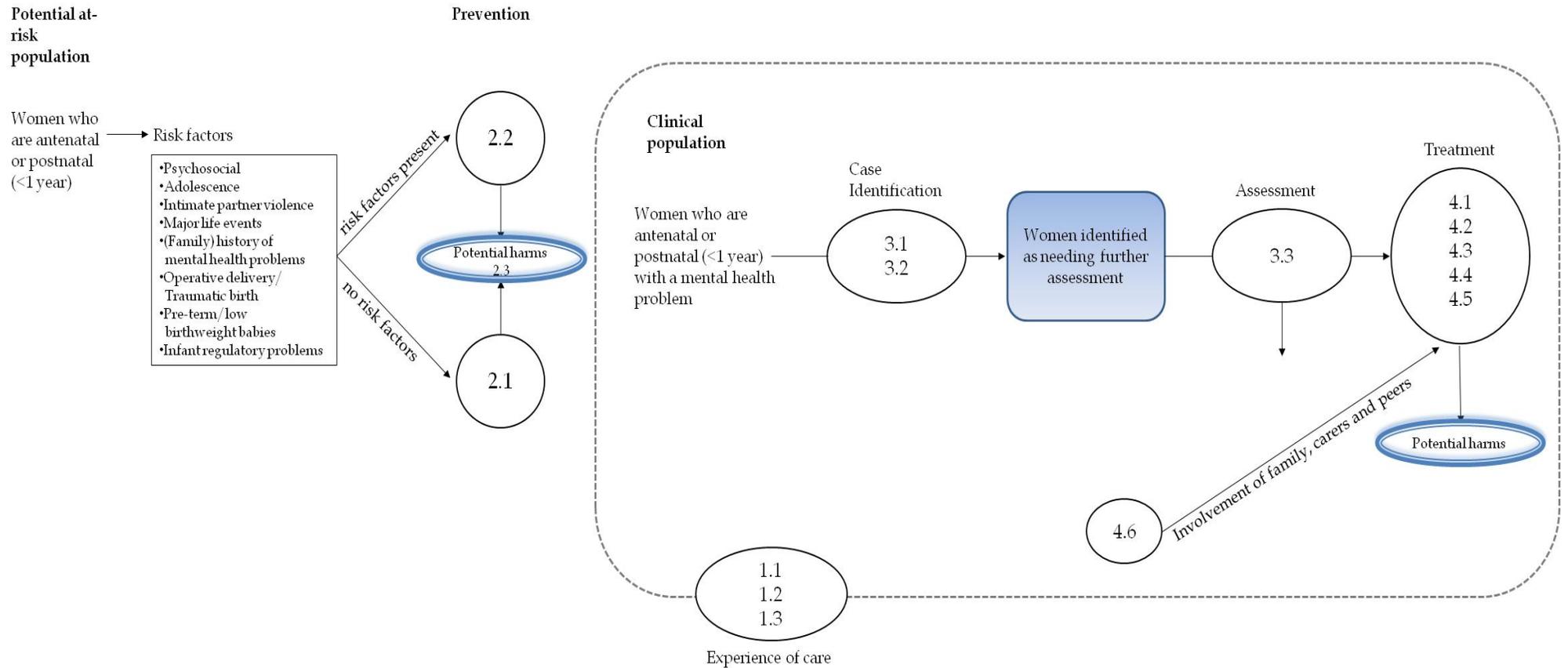
Consultant Clinical Psychologist, Perinatal Psychology, Specialist Lead, Paediatric Psychology, Acting Specialist Lead, Belfast Health & Social Care Trust, Belfast.

APPENDIX 7: STAKEHOLDERS WHO SUBMITTED COMMENTS IN RESPONSE TO THE CONSULTATION DRAFT OF THE GUIDELINE

Association for Post Natal Illness
Bipolar UK
Breastfeeding Network
British Association for Counselling and Psychotherapy
British Medical Association
British Pregnancy Advisory Service
British Psychological Society
Central & North West London NHS Foundation Trust
Children and Young People's Mental Health Coalition
College of Mental Health Pharmacy
Department of Health
Elective Cesarean
Family Links
Institute of Health Visiting
Maternal OCD
Mellow Parenting
National Childbirth Trust
National Perinatal Epidemiology Unit, University of Oxford
National Society for the Prevention of Cruelty to Children
NHS England
OCD Action
Oxford Health NHS Foundation Trust
Pandas Foundation
Royal College of General Practitioners
Royal College of Midwives
Royal College of Nursing
Royal College of Obstetricians and Gynaecologists
Royal College of Paediatrics and Child Health
Royal College of Psychiatrists
South London & Maudsley NHS Trust
St Mary's Hospital (CNWL)
Staffordshire and Stoke on Trent Partnership NHS Trust
Swansea University
The Marcé Society
Tommy's: The Baby Charity
University of Birmingham
University of Reading/ Royal Berkshire Hospital

APPENDIX 8: ANALYTIC FRAMEWORK AND REVIEW QUESTIONS

Analytic framework



Review questions

Experience of care
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?
Prevention
2.1 What is the effectiveness of selective preventative interventions in reducing the likelihood of developing mental health problems for women who are antenatal or postnatal? 2.2 What is the effectiveness of indicated preventative interventions in reducing the likelihood of developing mental health problems for women who are antenatal or postnatal? 2.3 What strategies should be adopted to minimise potential harm to the women or the fetus/infant of these interventions?
Case identification and assessment
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? 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: <ul style="list-style-type: none">• 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. 3.4 What strategies should be adopted to minimise potential harm to the women or the fetus/infant of these assessments?
Interventions for the treatment of mental health problems
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?

APPENDIX 9: REVIEW PROTOCOLS

Experience of care

Review question(s)	<p>1.1 What factors prevent women with a mental health problem who are pregnant or in the postnatal period accessing mental healthcare services?</p> <p>1.2 What factors improve or diminish the experience of services for women with a mental health problem who are pregnant or in the postnatal period?</p> <p>1.3 What modifications to services improve the experience of using services for women with a mental health problem who are pregnant or in the postnatal period?</p>
Sub-question(s)	<p>For women with mental health problems who are pregnant or in the postnatal period, is the experience of care different for:</p> <ul style="list-style-type: none"> • 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 <p>Where possible, the review will be conducted based on primary diagnosis of:</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • To identify obstacles to access by synthesising qualitative evidence 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 in pregnancy or the 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 pregnant or in the postnatal period.

<p>Criteria for considering studies for the review</p>	
<ul style="list-style-type: none"> Population 	<p>Included</p> <p>Women who are pregnant and in the postnatal period (from childbirth up to one year):</p> <ul style="list-style-type: none"> with subthreshold symptoms of a mental health problem who are 'at risk' of developing a mental health problem with existing mild, moderate and severe mental health problems who are currently receiving treatment (psychological or pharmacological) for an existing mental health problem <p>Excluded</p> <ul style="list-style-type: none"> women with a mental health problem after the first postnatal year women who are not pregnant or in the postnatal period (from childbirth up to one year) <p>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 cannot be obtained, then a study will be included if the majority (at least 51%) of its participants are eligible for the guideline review.</p> <p>Women who are more than one year into the postnatal period but are giving retrospective reports of the immediate postnatal period (within one year after childbirth) will also be included.</p>
<ul style="list-style-type: none"> Intervention 	<p>Review question 1.1</p> <ul style="list-style-type: none"> Factors or attributes of the individual who requires mental healthcare, that can inhibit access to services Practitioner-level factors or attributes that can inhibit an individual from accessing healthcare <p>Excluded factors</p> <ul style="list-style-type: none"> Systems and processes Practical or resource-based factors <p>Review question 1.2</p> <p>Actions by services that could improve or diminish the experience of care for example:</p> <ul style="list-style-type: none"> 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 <p>Review question 1.3</p> <p>Any intervention delivered directly to the service user, families, carers or peers.</p> <p>The provision of financial and practical support (for example direct payments) is outside of the scope of this guideline and will not be included.</p>

	This review will exclude: experiences of mental health problems in pregnancy or the postnatal period with no explicit implications for management, planning and/or delivery of care; case studies; autobiographical accounts; and qualitative measures of perceived intervention effectiveness where a quantitative approach would have been more appropriate.
<ul style="list-style-type: none"> • Comparison 	None
Critical Outcomes	<p>Review question 1.1 Identified factors affecting access</p> <p>Review question 1.2 Themes and specific issues that service users identify as improving or diminishing their experience of healthcare services</p> <p>Review question 1.3 Service user:</p> <ul style="list-style-type: none"> • Engagement, acceptability and uptake of services • Retention • Quality of Life • Satisfaction (validated measures only, specific items will not be analysed)
<ul style="list-style-type: none"> • Study design 	<p>Review question 1.1 and 1.2</p> <ul style="list-style-type: none"> • Systematic reviews of qualitative studies, primary qualitative studies, surveys. <p>Review question 1.3</p> <ul style="list-style-type: none"> • RCTs • Systematic reviews of RCTs • Systematic reviews of qualitative studies, primary qualitative studies, surveys. <p>Books, dissertation abstracts, trade magazines, policy and guidance, non-English language papers, and non-empirical research will be excluded.</p>
<ul style="list-style-type: none"> • Include unpublished data? 	<p>Yes but only where:</p> <ul style="list-style-type: none"> • 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.
<ul style="list-style-type: none"> • Restriction by date? 	<p>Systematic reviews of qualitative studies, primary qualitative studies, surveys: 1995 to 7 April 2014</p> <p>Systematic reviews of RCTs, RCTs: 2006 to 7 April 2014</p>
<ul style="list-style-type: none"> • Minimum sample size 	Include all sample sizes greater than one
<ul style="list-style-type: none"> • Study setting 	UK primary, secondary and tertiary healthcare services relevant to the NHS. This guideline will also be relevant to the work of, but will

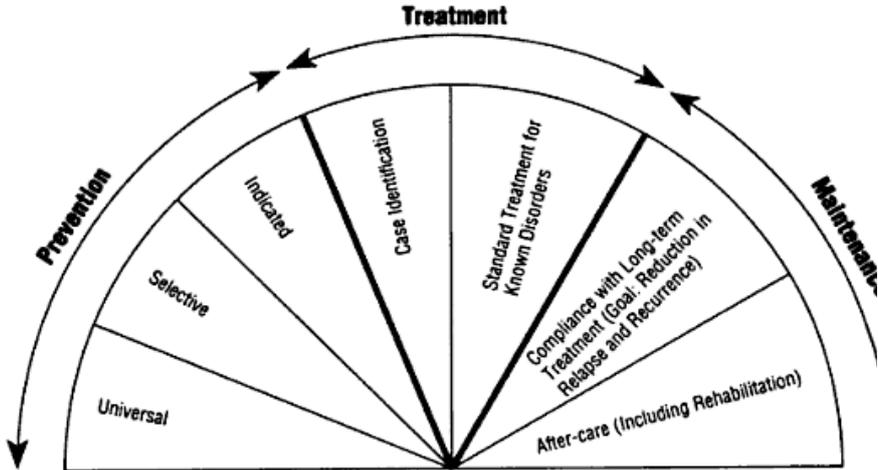
	not provide specific recommendations to, NHS funded services (for example, social services or the non-statutory sector).
Search strategy	<p>Review question: 1.1, 1.2 , 1.3 Study design searched: Systematic reviews of qualitative studies, primary qualitative studies, surveys.</p> <p>Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO</p> <p>Date restrictions: 1995 to 7 April 2014</p> <p>Review question: 1.3 Study designs searched: RCTs, systematic reviews of RCTs</p> <p>Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA</p> <p>Date restrictions: 2006 to 7 April 2014</p>
Searching other resources	Hand-reference searching of retrieved literature
The review strategy	<p>Review question 1.1 and 1.2 Thematic synthesis of qualitative papers. A modified matrix of service user experience will be used to organise themes.</p> <p>Review question 1.3 The initial aim is to conduct a meta-analysis evaluating the clinical effectiveness of the interventions. High quality systematic reviews (for example Cochrane reviews) identified as part of the search will be utilised but will only be used if they meet the following criteria:</p> <ul style="list-style-type: none"> • 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. <p>For each review, the following will also be extracted: year of review; total number of study participants; inclusion and exclusion criteria; age (mean); race (percent white); diagnosis. For each intervention or comparison group of interest, dose, frequency and duration of interventions will also be extracted.</p>

Interventions for the prevention of mental health problems

Review question(s)	Prevention

	<p>1.4 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?</p> <p>1.5 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?</p> <p>1.6 What strategies should be adopted to minimise potential harm to the women or the fetus/infant of these interventions?</p>
Sub-question(s)	<p>Where possible, consideration should be given to the specific needs of:</p> <ul style="list-style-type: none"> • 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 <p>Where possible, the review will be conducted based on primary diagnosis of:</p> <ul style="list-style-type: none"> • 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 pregnant or in the postnatal period, with and without identified baseline risk factors.
Background notes	<p>The Committee on Prevention of Mental Disorders (IOM)³ 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:</p> <p>Selective Prevention Interventions: targeted to individuals or a subgroup of the population whose risk of developing mental disorders is significantly higher than average, (for example 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).</p>

³ 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.

	<p>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.</p>  <p>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)</p>
<p>Criteria for considering studies for the review</p>	
<ul style="list-style-type: none"> Population 	<p>Included</p> <p>Review question 2.1 Women who are pregnant or in the postnatal period (from delivery to the end of the first year). Inclusion is not based on any other baseline risk factors.</p> <p>Review question 2.2 Women who are pregnant or in the postnatal period (from delivery to the end of the first year) whom are considered to be 'at risk' of developing mental health problems (see Australian guideline and Scottish Intercollegiate Guidelines Network (SIGN) for further reference). Include women:</p> <ul style="list-style-type: none"> 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 (for example SES) with infant regulatory problems who experienced an operative delivery or traumatic birth experienced a miscarriage who are adolescents <p>Exclude women:</p>

	<ul style="list-style-type: none"> • 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 pregnant or in the postnatal period (up to one year postnatal)
<ul style="list-style-type: none"> • Intervention 	<p>Review question 2.1</p> <ul style="list-style-type: none"> • Selective prevention intervention for all women who are pregnant or in the postnatal period with no other pre-specified baseline risk factors. <p>Review question 2.2</p> <ul style="list-style-type: none"> • Indicated prevention interventions for women with at least one identified baseline risk factor. <p>Included interventions</p> <ul style="list-style-type: none"> • Psychosocial • Pharmacological • Combined pharmacological and psychosocial • Care planning <p>Excluded Interventions</p> <ul style="list-style-type: none"> • 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)
<ul style="list-style-type: none"> • Comparison 	<p>Review question 2.1 and 2.2</p> <ul style="list-style-type: none"> • Treatment as usual, no treatment, waitlist control, attention control. • Another active prevention intervention
Critical Outcomes	<p>Maternal Outcomes</p> <ul style="list-style-type: none"> • Symptom-based <ul style="list-style-type: none"> - Diagnosis of mental disorder - Symptomatology (clinician- and self-report) - Relapse • Service utilisation <ul style="list-style-type: none"> - Hospitalisation for mental health problems - Retention in services (assessed through drop-out rates as a proxy measure) • Experience of care <ul style="list-style-type: none"> - Satisfaction - Acceptability of treatment (including drop-out as a proxy measure) • Quality of life <ul style="list-style-type: none"> - Quality of life measures

	<ul style="list-style-type: none"> - Functional disability - Social functioning - Perceived parenting stress - Disruption to mother and infant , for example having to attend a clinic shortly after birth (versus home visits) <ul style="list-style-type: none"> • Harm <ul style="list-style-type: none"> - Side effects (including drop-out because of side effects) • Quality of mother-infant interaction and infant care <ul style="list-style-type: none"> - Quality of mother-infant interaction measures - Establishing or continuing breastfeeding <p>Fetal/Infant outcomes</p> <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> - Planned (health visitor, vaccinations, well-baby check-ups) - Unplanned (A&E visits, inpatient, urgent or acute care) - Social service involvement
Important but not critical outcomes	
<ul style="list-style-type: none"> • Study design 	<p>Review question 2.1 and 2.2 Systematic reviews of RCTs Primary RCTs</p> <p>Review question 2.3 N/A; GDG consensus-based</p>
<ul style="list-style-type: none"> • Include unpublished data? 	<p>Yes but only where:</p> <ul style="list-style-type: none"> • 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. <p>Specific searches for grey literature will not be conducted.</p>
<ul style="list-style-type: none"> • Restriction by date? 	2006 to 7 April 2014
<ul style="list-style-type: none"> • Minimum sample size 	No
<ul style="list-style-type: none"> • 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 (for example social services, or the non-statutory sector)
Search strategy	<p>Review question: 2.1, 2.2, 2.3</p> <p>Study designs searched: RCTs, systematic reviews of RCTs</p> <p>Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA</p> <p>Date restrictions: 2006 to 7 April 2014</p>
Searching other resources	Hand-reference searching of retrieved literature
The review strategy	<p>The initial aim is to conduct a meta-analysis evaluating the clinical effectiveness of the interventions. However, high quality systematic reviews (for example Cochrane reviews) identified as part of the search can be utilised but will only be used if they meet the following criteria:</p> <ul style="list-style-type: none"> • 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. <p>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</p> <p>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.</p>

Case identification and assessment

Review question(s)	<p>Case Identification</p> <p>1.7 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 are pregnant or in the postnatal period to consider referral or further assessment for the presence of mental health problems?</p>

	<p>1.8 What are the most appropriate methods/ instruments for the identification of mental health problems in women who are pregnant or in the postnatal period?</p> <p>Assessment</p> <p>1.9 For women who are pregnant or in the postnatal period, what are the key components of, and the most appropriate structure for a comprehensive diagnostic assessment (including diagnosis)?</p> <p>Consider:</p> <ul style="list-style-type: none"> • 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.
<p>Sub-question(s)</p>	<p>Where possible, consideration should be given to the specific needs of:</p> <ul style="list-style-type: none"> • 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 <p>Where possible, the review will conducted based on primary diagnosis of:</p> <ul style="list-style-type: none"> • 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
<p>Chapter</p>	<p>Chapter 6: Case identification and assessment</p>
<p>Objectives</p>	<ul style="list-style-type: none"> • 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.

	<ul style="list-style-type: none"> To assess the diagnostic accuracy of assessment tools.
Criteria for considering studies for the review	
<ul style="list-style-type: none"> Population 	Included Women who are pregnant or in the postnatal period (from delivery to the end of the first year)
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> Comparison 	Review question 3.1 N/A Review question 3.2 and 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 and 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 and 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.
<ul style="list-style-type: none"> Study design 	Review question 3.1 N/A; GDG consensus-based Review question 3.2 and 3.3 <ul style="list-style-type: none"> Systematic reviews of RCTs Primary RCTs Cross-sectional (cohort and case control) studies
<ul style="list-style-type: none"> Include unpublished data? 	Yes but only where: <ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> • Minimum sample size 	No
<ul style="list-style-type: none"> • 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 (for example social services, or the non-statutory sector)
Search strategy	<p>Review question: 3.1, 3.2, 3.3 Study design searched: Systematic reviews of RCTs, primary RCTs</p> <p>Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA</p> <p>Date restrictions: 2006 to 7 April 2014</p> <p>Study design searched: Cross sectional (cohort and case control studies)</p> <p>Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO</p> <p>Date restrictions: Database inception to 7 April 2014</p>
Searching other resources	Hand-reference searching of retrieved literature.
The review strategy	<p>Review question 3.2</p> <ul style="list-style-type: none"> • Pooled diagnostic accuracy meta-analyses on the sensitivity and specificity of specific brief case identification instruments for mental health problems will be conducted (dependent on available data). • In the absence of adequate data, a narrative review of case identification instruments will 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). <p>Review question 3.3</p> <ul style="list-style-type: none"> • For assessment, the GDG will use a consensus-based approach to identify the key components of an effective assessment.

Interventions for the treatment of mental health problems

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<p>Review question(s)</p>	<p>1.10 For women with mental disorders who are pregnant or in the postnatal period, what are the benefits and/or potential harms of psychosocial interventions to treat mental health problems?</p> <p>1.11 For women with mental disorders who are pregnant or in the postnatal period, what are the benefits and/or potential harms of pharmacological interventions to treat mental health problems?</p> <p>1.12 For women with mental disorders who are pregnant or in the postnatal period, what are the benefits and/or potential harms of combined pharmacological and psychosocial treatment interventions to treat mental health problems?</p> <p>1.13 For women with mental disorders who are pregnant or in the postnatal period, what are the benefits and/or potential harms of electroconvulsive therapy to treat mental health problems?</p> <p>1.14 For women with mental disorders who are pregnant or in the postnatal period, what are the benefits and/or potential harms of interventions targeted at improving the quality of the mother-child interaction?</p> <p>1.15 What is the role of the family, carers and peers in the treatment and support of women with mental health problems in pregnancy and the postnatal period?</p>
<p>Sub-question(s)</p>	<p>Where possible, consideration should be given to the specific needs of:</p> <ul style="list-style-type: none"> • 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 <p>Where possible, the review will be conducted based on primary diagnosis of:</p> <ul style="list-style-type: none"> • 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
<p>Chapter</p>	<p>Chapter 10: Treatment interventions</p>

Topic Group	
Objectives	To evaluate the clinical effectiveness of interventions for the treatment of mental health problems for women who are pregnant or in the postnatal period.
Criteria for considering studies for the review	
<ul style="list-style-type: none"> Population 	<p>Included</p> <p>Women who have mental health problems during pregnancy and the postnatal period (from delivery to the end of the first year). Include:</p> <ul style="list-style-type: none"> • 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 <p>Exclude women:</p> <ul style="list-style-type: none"> • With no current diagnosis of a mental health problem • who are greater than one year into the postnatal period • who are not pregnant or in the postnatal period (up to one year postnatal)
<ul style="list-style-type: none"> Intervention 	<ul style="list-style-type: none"> • Psychological interventions • Support and education interventions • Pharmacological interventions • Combined psychological and pharmacological interventions • Electroconvulsive therapy • Interventions that address the mother-child interaction
<ul style="list-style-type: none"> Comparison 	Treatment as usual, no treatment, wait-list control, active control, other active interventions
Critical Outcomes	<p>Maternal Outcomes</p> <ul style="list-style-type: none"> • Symptom-based <ul style="list-style-type: none"> - Diagnosis of mental disorder - Symptomatology - Relapse - Use of drugs/alcohol • Service utilisation <ul style="list-style-type: none"> - Hospitalisation - Retention in services (assessed through drop-out rates as a proxy measure) - Health service utilisation (specify , for example use of psychiatric services) • Experience of care <ul style="list-style-type: none"> - Satisfaction (validated measures only, specific items will not be analysed) - Acceptability of treatment (assessed through questioning or through including drop-out as a proxy measure) • Quality of life <ul style="list-style-type: none"> - Quality of life measures - Functional disability - Social functioning - Self-esteem - Perceived parenting stress - Maternal confidence - Preservation of rights

	<ul style="list-style-type: none"> • Harm <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - Quality of mother-infant interaction - Maternal attitude towards motherhood - Establishing or continuing breastfeeding <p>Infant outcomes (no restriction of length of follow-up)</p> <ul style="list-style-type: none"> • 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 (for example vaccinations, well-baby check-ups)
Important but not critical outcomes	
<ul style="list-style-type: none"> • Study design 	<p>Review questions 4.1 to 4.6 Systematic reviews of RCTs Primary RCTs</p>
<ul style="list-style-type: none"> • Include unpublished data? 	<p>Yes but only where:</p> <ul style="list-style-type: none"> • 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. <p>Specific searches for grey literature will not be conducted.</p>
<ul style="list-style-type: none"> • Restriction by date? 	<p>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</p>
<ul style="list-style-type: none"> • Minimum sample size 	No
<ul style="list-style-type: none"> • 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 (for example social services, or the non-statutory sector)
Search strategy	<p>Review question: 4.1, 4.2, 4.3, 4.4, 4.5, 4.6 Study designs searched: Systematic reviews of RCTs, RCTs</p> <p>Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA</p> <p>Date restrictions: 2006 to 7 April 2014</p> <p>Review question: 4.1 Study designs searched: All study designs</p> <p>Databases searched: General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA</p> <p>Date restrictions: Database inception to 7 April 2014</p> <p>Review question: 4.2 Study designs searched: Cross sectional studies (including cohort and case-control studies)</p> <p>Databases searched: General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO</p> <p>Date restrictions: Database inception to 7 April 2014</p>
Searching other resources	Hand-reference searching of retrieved literature
The review strategy	<p>The initial aim is to conduct a meta-analysis evaluating the clinical effectiveness of the interventions. However, high quality systematic reviews (for example Cochrane reviews) identified as part of the search can be utilised but will only be used if they meet the following criteria:</p> <ul style="list-style-type: none"> • 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. <p>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</p>

	<p>recommendations. If GRADE assessments are unavailable, they will be generated.</p> <p>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.</p>
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APPENDIX 10: SEARCH STRATEGIES FOR THE IDENTIFICATION OF CLINICAL STUDIES

Scoping searches

A broad preliminary search of the literature was undertaken in March 2013 to obtain an overview of the issues likely to be covered by the scope, and to help define key areas. Searches were restricted to clinical guidelines, Health Technology Assessment (HTA) reports, key systematic reviews and RCTs.

- BMJ Clinical Evidence
- Canadian Medical Association (CMA) Infobase (Canadian guidelines)
- Clinical Policy and Practice Program of the New South Wales Department of Health (Australia)
- Clinical Practice Guidelines (Australian Guidelines)
- Cochrane Central Register of Controlled Trials (CENTRAL)
- Cochrane Database of Abstracts of Reviews of Effects (DARE)
- Cochrane Database of Systematic Reviews (CDSR)
- Excerpta Medica Database (Embase)
- Guidelines International Network (G-I-N)
- Health Evidence Bulletin Wales
- Health Management Information Consortium [HMIC]
- HTA database (technology assessments)
- Medical Literature Analysis and Retrieval System Online (MEDLINE/MEDLINE In-Process)
- National Health and Medical Research Council (NHMRC)
- National Library for Health (NLH) Guidelines Finder
- New Zealand Guidelines Group
- NHS Centre for Reviews and Dissemination (CRD)
- Organizing Medical Networked Information (OMNI) Medical Search
- Scottish Intercollegiate Guidelines Network (SIGN)
- Turning Research Into Practice (TRIP)
- United States Agency for Healthcare Research and Quality (AHRQ)
- Websites of NICE - including NHS Evidence - and the National Institute for Health Research (NIHR) HTA Programme for guidelines and HTAs in development.

Further information about this process can be found in *The Guidelines Manual* (NICE, 2012).

Systematic search

Each search was constructed using the groups of terms set out in Text Box 1. The full set of search terms is documented in sections 1 to 3.52. The selection of search terms was kept broad to maximise retrieval of evidence in a wide range of areas of interest to the GDG.

Text Box 1: Summary of systematic search strategies: Search strategy construction

Summary of systematic search strategies for clinical evidence					
Section 1: experience of care					
Review question(s)	Search type	Search construction	Study design searched	Databases searched	Date range searched
1.1, 1.2, 1.3	Focused search	<p>[((population terms version 1) AND (qualitative systematic review study design filter terms)) OR ((patient experience terms) AND ((primary qualitative study design filter terms OR survey study design filter terms)))]</p> <p>[population terms version 1]</p>	<ul style="list-style-type: none"> Systematic reviews of qualitative studies, primary qualitative studies, surveys. 	<p>General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO</p> <p>HMIC</p>	<p>1995 to 07 April 2014</p> <p>1995 to 07 April 2014</p>

1.3	Generic search	General medical databases: [(population terms version 1) AND (RCT/SR study design filter terms)] Topic specific databases: [(population terms version 1)]	RCTs, systematic reviews of RCTs	General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA	2006 to 07 April 2014

Section 2: prevention					
Review question(s)	Search type	Search construction	Study design searched	Databases searched	Date range searched
2.1, 2.2, 2.3	Generic search	General medical databases: [(population terms version 1) AND (RCT/SR study design filter terms)] Topic specific databases: [(population terms version 1)]	RCTs, systematic reviews of RCTs	General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA	2006 to 07 April 2014
Section 3: case identification and assessment					
Review question(s)	Search type	Search construction	Study design searched	Databases searched	Date range searched
3.1, 3.2, 3.3	Focused search	[(Population terms version 1) AND (((general identification instrument/ diagnostic assessment terms) AND (sensitivity/specificity terms)) OR (named instruments))]	All study designs	General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO	Database inception to 07 April 2014
3.1, 3.2, 3.3	Generic search	General medical databases: [(population terms version 1) AND (RCT/SR study design filter terms)] Topic specific databases: [(population terms version 1)]	RCTs, systematic reviews of RCTs	General medical databases: CINAHL, Embase, MEDLINE,	2006 to 07 April 2014

				PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA	
Section 4: interventions for the treatment of mental health problems					
Review question(s)	Search type	Search construction	Study design searched	Databases searched	Date range searched
4.1, 4.2, 4.3, 4.4, 4.5, 4.6	Generic search	General medical databases: [(population terms version 1) AND (RCT/SR study design filter terms)] Topic specific databases: [(population terms version 1)]	RCTs, systematic reviews of RCTs	General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: CDSR, CENTRAL, DARE, HTA	2006 to 07 April 2014

4.1	Focused search	[(still birth terms) AND (holding terms)]	All study designs	<p>General medical databases: CINAHL, Embase, MEDLINE, PreMEDLINE, PsycINFO</p> <p>Topic specific databases: CDSR, CENTRAL, DARE, HTA</p>	Database inception to April 2014
4.2	Focused search	<p>Search 1 [(population terms version 1 OR population terms version 2) AND (pharmacological terms) AND (harm terms) AND (cross sectional, cohort and case control study design filter terms)]</p> <p>Search 2 (high specificity) [(population terms version 1 OR population terms version 2) AND (pharmacological terms) AND (harm terms)]</p>	<p>Search 1 Cross sectional studies (including cohort and case-control studies)</p> <p>Search 2 All studies</p>	General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO	Database inception to April 2014

1 APMH STEM

1.1 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP Version 1

- 1 birth/ or exp breastfeeding/ or breastmilk/ or exp childbirth/ or lactation/
or newborn/ or obstetric\$.hw. or pelvimetry/ or perinatal period/ or exp
pregnancy/ or exp pregnancy disorder/
- 2 1 use emez
exp breastfeeding/ or exp delivery, obstetric/ or exp infant, newborn/ or exp
lactation/ or exp maternal health services/ or exp maternal child nursing/ or
milk, human/ or obstetric\$.hw. or parturition/ or pelvimetry/ or exp
- 3 perinatal care/ or peripartum period/ or exp postpartum period/ or exp
pregnancy/ or exp pregnancy complications/ or exp pregnancy, multiple/ or
prenatal care/ or prenatal diagnosis/ or exp pregnancy trimesters/ or
uterine monitoring/ or weaning/
- 4 3 use mesz
breastfeeding/ or "labour (childbirth)"/ or lactation/ or obstetrical
- 5 complications/ or obstetric\$.hw,id. or perinatal period/ or postnatal care/ or
postnatal period/ or exp pregnancy/ or exp prenatal care/ or exp pregnancy
outcomes/ or prenatal diagnosis/ or weaning/
- 6 5 use psych
(ante?natal\$ or ante?part\$ or birth\$ or breastfeed\$ or (breast adj (feed\$ or
fed)) or child?birth\$ or ((first or second or third) adj2 trimester\$) or labor or
- 7 laboring or labour or labouring or lactat\$ or maternal\$ or new?born\$ or
peri?natal\$ or obstetric\$ or postbirth\$ or post?partum\$ or post?natal\$ or
pregnan\$ or pre?nat\$ or puerperal\$ or puerperium\$ or wean\$1 or
weaning).ti,ab.
- 8 or/2,4,6-7
- 9 exp mental disease/ or mental patient/
- 10 9 use emez
- 11 exp mental disorders/ or mentally ill persons/
- 12 11 use mesz
- 13 exp chronic mental illness/ or exp mental disorders/
- 14 13 use psych
- 15 ((mental\$ or psychologic\$) adj2 (deficien\$ or disease\$ or disorder\$ or
disturbance\$ or dysfunction\$ or health or illness\$ or problem\$)).ti,ab,id.
- 16 or/10,12,14-15
- 17 anxiety/ or exp anxiety disorder/ or hyperhidrosis/ or exp mutism/

18 17 use emez

19 anxiety/ or exp anxiety disorders/ or blushing/ or exp hyperhidrosis/ or mutism/ or or shyness/

20 19 use mesz

21 anxiety/ or anxiety management/ or exp anxiety disorders/ or exp mutism/ or social anxiety/ or sweating/ or timidity/

22 21 use psyh

(anxiat\$ or anxious\$ or ((chronic\$ or excessiv\$ or intens\$ or (long\$ adj2 last\$)

23 or neuros\$ or neurotic\$ or ongoing or persist\$ or serious\$ or sever\$ or uncontrol\$ or un control\$ or unrelent\$ or un relent\$) adj2 worry)).ti,ab,id.

(body dysmorphic disorder or compulsions or compulsive behavior or obsessive behavior).sh. or (body dysmorphi\$ or clean\$ response\$ or compulsion\$ or dysmorphophobi\$ or imagine\$ ugl\$ or obsession or

24 obsessional or obsessions or obsessive compulsive or obsess\$ ruminat\$ or ocd or osteochondr\$ or recurr\$ thought\$ or scrupulosity or ((arrang\$ or check\$ or clean\$ or count\$ or hoard\$ or order\$ or repeat\$ or symmetr\$ or wash\$) adj compulsi\$)).ti,ab,id,hw.

25 panic.sh. or panic\$.ti,ab.

(acrophob\$ or agoraphob\$ or claustrophob\$ or emetophob\$ or enfantaphob\$ or homophob\$ or infantaphob\$ or kinesiphob\$ or lesbophob\$ or neophob\$ or neurophob\$ or phobi\$ or transphob\$ or to?ophobi\$ or trypanophob\$ or xenophob\$ or ((acute\$ or chronic\$ or extreme\$ or intens\$ or irrational\$ or persistent\$ or serious\$) adj2 fear\$) or (fear\$ adj4 (air travel or animal\$ or

26 birth\$ or blood\$ or buses or ((closed or public) adj2 space\$) or childbirth\$ or crowd\$ or dark\$ or dental\$ or dentist\$ or dog\$1 or dying or falls or falling or fly or flying or height\$ or hypochondriacal or injection\$ or injur\$ or laughed or leaving home or lightening or movement\$ or needle\$ or night\$ or panic\$ or plane\$ or pregnan\$ or reinjure\$ or school\$ or snake\$ or space\$ or spider\$ or test\$ or thunder\$ or tokophob\$ or tocophob\$ or train\$ or travel\$ or water)) or specific fear\$).ti,ab,id.

((anxiat\$ or anxious\$ or phobia\$ or phobic\$) adj2 (performance or social\$)) or anthropophobi\$ or socioanxi\$ or sociophobi\$ or ((blush\$ or sweat\$ or trembl\$) adj3 (anxiat\$ or anxious\$ or chronic\$ or excessiv\$ or fear\$ or severe)) or ((interpersonal or inter personal or social\$ or socio\$) adj2 (aversion\$ or aversiv\$ or confiden\$ or difficult\$ or disorder\$ or distress\$ or fear\$)) or

27 hyperhydrosis or hyperperspirat\$ or (hyper adj (hydrosis or perspirat\$)) or ((mute\$ or mutism) adj2 (elective\$ or selective\$)) or ((negative evaluation or speak\$) adj3 (anxiat\$ or anxious\$ or distress\$ or fear\$)) or paruresis or (((personalit\$ or phobi\$ or social\$ or socio\$) adj2 avoid\$) or avoidant disorder) or ((phobi\$ or social) adj2 neuros\$) or phobic disorder\$ or (shy or shyness) or specific phobia\$).ti,ab,id.

- (critical incident stress or emotional trauma or psychological stress or stress, psychological or traumatic neurosis).sh. or (acute stress or asd or combat neuros\$ or combat syndrome or desnos or ((extreme or psycho\$) adj (stress\$ or trauma\$)) or flash back\$ or flashback\$ or hypervigilan\$ or hypervigilen\$
28 or posttrauma\$ or post trauma\$ or ptsd or railway spine or (rape adj2 trauma\$) or re experienc\$ or reexperienc\$ or stress disorder\$ or torture syndrome or (traumatic adj (neuros\$ or stress)) or (trauma\$ and (avoidance or birth\$ or death\$ or emotion\$ or grief or horror or nightmare\$ or night mare\$))).ti,ab,id.
- 29 or/18, 20,22-28
- 30 exp eating disorder/ use emez or exp eating disorders/ use mesz,psych or binge eating/ use psych
(anorexi\$ or bing\$ or bulimi\$ or (compulsive adj2 (eat\$ or vomit\$)) or (eating
31 adj2 disorder\$) or ednos or ((forced or self induc\$ or selfinduc\$) adj2 (purg\$ or vomit\$)) or hyperorexia or over eat\$ or overeat\$ or (restrict\$ adj2 eat\$)).ti,ab,id.
- 32 or/30-31
- 33 exp mood disorder/ use emez
- 34 depression/ or exp mood disorders/ use mesz
- 35 exp affective disorders/ use psych
- 36 ((affective or mood) adj (disorder\$ or disturbance\$ or dysfunction\$)).ti,ab,id.
- 37 (cyclothym\$ or depress\$ or dysthym\$ or (low adj2 mood) or melanchol\$ or seasonal affective disorder\$).ti,ab,id.
(((bipolar or bi polar) adj5 (disorder\$ or depress\$)) or ((cyclothymi\$ or rapid
38 or ultradian) adj5 cycl\$) or hypomani\$ or mania\$ or manic\$ or mixed episode\$ or rcbd).ti,ab,id.
- 39 or/33-38
- 40 "explode schizophrenia"/ or (psychosis\$ or psychotic\$).hw.
- 41 40 use emez
- 42 exp psychotic disorders/ or exp schizophrenia/ or "schizophrenia and disorders with psychotic features"/
- 43 42 use mesz
- 44 exp psychosis/ or exp schizophrenia/
- 45 44 use psych
(a?athisi\$ or hebephreni\$ or (neuroleptic\$ and ((malignant and syndrome) or (movement adj2 disorder))) or oligophreni\$ or psychotic\$ or psychos?s or
46 schizo\$ or (tardiv\$ and dyskine\$)).ti,ab,id. or ((parkinsoni\$ or neuroleptic induc\$).ti,ab,id. not (parkinson\$ and disease).ti.) or (delusion\$ or hallucinat\$ or paranoi\$ or psychiatric\$ or thought disorder\$).ti,ab,id,hw.

47 or/41,43,45-46

48 exp personality disorder/ use emez

49 exp personality disorders/ use mesz

50 exp personality disorders/

51 50 use psych

((aggressiv\$ or anxious\$ or borderline\$ or dependent\$ or eccentric\$ or emotional\$ or immature or passiv\$ or psychoneurotic or psycho neurotic or unstable) adj5 personalit\$) or (anal\$ adj (personalit\$ or character\$ or retentiv\$)) or aspd or character disorder\$ or (personalit\$ adj5 disorder\$).ti,ab,id.

(anankastic\$ or asocial\$ or avoidant\$ or antisocial\$ or anti social\$ or compulsiv\$ or dissocial\$ or histrionic\$ or narciss\$ or neuropsychopath\$ or obsessiv\$ or paranoi\$ or psychopath\$ or sadist\$ or schizoid\$ or schizotyp\$ or sociopath\$ or (moral adj2 insanity)).ti,ab,id.

(cluster a or cluster b or cluster c or (dsm and (axis and ii)) or (icd and (f60 or f61 or f62)) or ((anxious\$ or dramatic\$ or eccentric\$ or emotional\$ or fearful\$ or odd\$) adj5 cluster\$)).ti,ab.

55 or/48-49,51-54

56 automutilation/ or exp suicidal behavior/

57 56 use emez

58 self-injurious behavior/ or self mutilation/ or suicide/ or suicidal ideation/ or suicide, attempted/

59 58 use mesz

60 suicide/ or attempted suicide/ or exp self injurious behavior/ or suicidal ideation/ or suicide prevention/ or suicidology/

61 60 use psych

(autoaggress\$ or automutilat\$ or (auto adj (aggress\$ or mutilat\$)) or cutt\$ or overdose\$ or (self adj2 cut\$) or selfdestruct\$ or selfharm\$ or selfimmolat\$ or selfinflict\$ or selfinjur\$ or selfmutilat\$ or selfpoison\$ or (self adj (destructbor\$ or harm\$ or immolat\$ or inflict\$ or injur\$ or mutilat\$ or poison\$)) or suicid\$).ti,ab,id.

63 or/57,59,61-62

64 addiction/ or alcoholism/ or exp alcohol abuse/ or exp drug dependence/ or exp drug abuse/ or substance abuse/ or withdrawal syndrome/

65 64 use emez

66 drug seeking behavior/ or exp substance-related disorders/

67 66 use mesz

addiction/ or exp drug abstinence/ or drug abuse prevention/ or exp drug
68 abuse/ or drug overdoses/ or exp drug withdrawal/ or needle exchange
programs/ or sobriety/
69 68 use psych
70 (alcoholi\$ or (alcohol\$ and (abstinence or detoxification or intoxicat\$ or
rehabilit\$ or withdraw\$))).id,hw.
(alcoholi\$ or drinker\$1 or (drink\$ adj2 use\$1) or ((alcohol\$ or drink\$) adj5
(abstinen\$ or abstain\$ or abus\$ or addict\$ or attenuat\$ or binge\$ or crav\$ or
71 dependen\$ or detox\$ or disease\$ or disorder\$ or excessiv\$ or harm\$ or
hazard\$ or heavy or high risk or intoxicat\$ or misus\$ or overdos\$ or over
dos\$ or problem\$ or rehab\$ or reliance or reliant or relaps\$ or withdraw\$)) or
(control\$ adj2 drink\$) or sobriet\$).ti,ab,id.
(cannabis or cocaine or hashish or heroin or marihuana or marijua\$ or
((acetomorphine or amphetamine\$ or amphetamine\$ or analeptic\$ or crack or
crank or dextroamphetamine\$ or diacephine or diacetylmorphine or
diacetylmorphine or diamorphin\$ or diamorphine or diaphorin or drug or
methadone\$ or methamphetamine\$ or morfin\$ or morphacetin or morphin\$
72 or naltrexone or narcotic\$ or opioid\$ or opium or polydrug\$ or
psychostimulant\$ or speed or stimulant\$ or stimulant\$ or substance or
uppers) adj3 (abstain\$ or abstinen\$ or abus\$ or addict\$ or (excessive adj use\$)
or dependen\$ or (inject\$ adj2 drug\$) or intoxicat\$ or misus\$ or over dos\$ or
overdos\$ or (use\$ adj (disorder\$ or illicit)) or withdraw\$)) or ((drug or
substance) adj use\$)).ti,ab,hw,id.
73 or/65,67,69-72
74 or/16,29,32,39,47,55,63,73
75 8 and 74

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s53	s11 and s52
s52	s12 or s13 or s14 or s15 or s16 or s17 or s18 or s19 or s20 or s21 or s22 or s23 or s24 or s25 or s26 or s27 or s28 or s29 or s30 or s31 or s32 or s33 or s34 or s35 or s36 or s37 or s38 or s39 or s40 or s41 or s42 or s43 or s44 or s45 or s46 or s47 or s48 or s49 or s50 or s51
s51	ti ((cannabis or cocaine or hashish or heroin or marihuana or marijua* or ((acetomorphine or amphetamine* or amphetamine* or analeptic* or crack or crank or dextroamphetamine* or diacephine or diacetylmorphine or diacetylmorphine or diamorphin* or diamorphine or diaphorin or drug or

	methadone* or methamphetamine* or morfin* or morphacetin or morphin* or naltrexone or narcotic* or opioid* or opium or polydrug* or psychostimulant* or speed or stimulant* or stimulant* or substance or uppers) n3 (abstain* or abstin* or abus* or addict* or (excessive n1 use*) or dependen* or (inject* n2 drug*) or intoxicat* or misus* or "over dos*" or overdos* or (use* n1 (disorder* or illicit)) or withdraw*)) or ((drug or substance) n1 use*)) or ab ((cannabis or cocaine or hashish or heroin or marihuana or marijuana* or ((acetomorphine or amphetamine* or amphetamine* or analeptic* or crack or crank or dextroamphetamine* or diacephine or diacetylmorphine or diacetylmorphine or diamorphin* or diamorphine or diaphorin or drug or methadone* or methamphetamine* or morfin* or morphacetin or morphin* or naltrexone or narcotic* or opioid* or opium or polydrug* or psychostimulant* or speed or stimulant* or stimulant* or substance or uppers) n3 (abstain* or abstin* or abus* or addict* or (excessive n1 use*) or dependen* or (inject* n2 drug*) or intoxicat* or misus* or "over dos*" or overdos* or (use* n1 (disorder* or illicit)) or withdraw*)) or ((drug or substance) n1 use*))
s50	mw cannabis or cocaine or hashish or heroin or marihuana or marijuana*
s49	ti ((alcoholi* or drinker* or (drink* n2 use*) or ((alcohol* or drink*) n5 (abstin* or abstain* or abus* or addict* or attenuat* or binge* or crav* or dependen* or detox* or disease* or disorder* or excessiv* or harm* or hazard* or heavy or "high risk" or intoxicat* or misus* or overdos* or "over dos*" or problem* or rehab* or reliance or reliant or relaps* or withdraw*)) or (control* n2 drink*) or sobriet*)) or ab ((alcoholi* or drinker* or (drink* n2 use*) or ((alcohol* or drink*) n5 (abstin* or abstain* or abus* or addict* or attenuat* or binge* or crav* or dependen* or detox* or disease* or disorder* or excessiv* or harm* or hazard* or heavy or "high risk" or intoxicat* or misus* or overdos* or "over dos*" or problem* or rehab* or reliance or reliant or relaps* or withdraw*)) or (control* n2 drink*) or sobriet*))
s48	mw (alcohol* and (abstinence or detoxification or intoxicat* or rehabilit* or withdraw*)) or mw alcoholi*
s47	(mh "drug abuse (saba ccc)") or (mh "drug abuse control (saba ccc)") or (mh "substance use rehabilitation programs+")
s46	(mh "substance dependence+") or (mh "alcohol withdrawal syndrome+") or (mh "substance withdrawal syndrome") or (mh "neonatal abstinence syndrome") or (mh "substance abuse+") or (mh "substance use disorders+")
s45	ti ((autoaggress* or automutilat* or (auto n1 (aggress* or mutilat*)) or cutt* or overdose* or (self n2 cut*) or selfdestruct* or selfharm* or selfimmolat* or selfinflict* or selfinjur* or selfmutilat* or selfpoison* or (self n1 (destruct*

	or harm* or immolat* or inflict* or injur* or mutilat* or poison*) or suicid*) or ab ((autoaggress* or automutilat* or (auto n1 (aggress* or mutilat*)) or cutt* or overdose* or (self n2 cut*) or selfdestruct* or selfharm* or selfimmolat* or selfinflict* or selfinjur* or selfmutilat* or selfpoison* or (self n1 (destruct* or harm* or immolat* or inflict* or injur* or mutilat* or poison*)) or suicid*))
s44	(mh "suicide") or (mh "suicidal ideation") or (mh "suicide, attempted") or (mh "suicide risk (saba ccc)") or (mh "suicide self-restraint (iowa noc)") or (mh "suicide prevention (iowa nic)")
s43	(mh "risk for self-mutilation (nanda)") or (mh "self mutilation risk (saba ccc)") or (mh "self-mutilation restraint (iowa noc)") or (mh "injuries, self-inflicted")
s42	(mh "self-injurious behavior")
s41	ti (("cluster a" or "cluster b" or "cluster c" or (dsm and (axis and ii)) or (icd and (f60 or f61 or f62)) or ((anxious* or dramatic* or eccentric* or emotional* or fearful* or odd*) n5 cluster*))) or ab (("cluster a" or "cluster b" or "cluster c" or (dsm and (axis and ii)) or (icd and (f60 or f61 or f62)) or ((anxious* or dramatic* or eccentric* or emotional* or fearful* or odd*) n5 cluster*)))
s40	ti ((anankastic* or asocial* or avoidant* or antisocial* or "anti social*" or compulsiv* or dissocial* or histrionic* or narciss* or neuropsychopath* or obsessiv* or paranoi* or psychopath* or sadist* or schizoid* or schizotyp* or sociopath* or (moral n2 insanity))) or ab ((anankastic* or asocial* or avoidant* or antisocial* or "anti social*" or compulsiv* or dissocial* or histrionic* or narciss* or neuropsychopath* or obsessiv* or paranoi* or psychopath* or sadist* or schizoid* or schizotyp* or sociopath* or (moral n2 insanity)))
s39	ti ((((aggressiv* or anxious* or borderline* or dependent* or eccentric* or emotional* or immature or passiv* or psychoneurotic or "psycho neurotic" or unstable) n5 personalit*) or (anal* n1 (personalit* or character* or retentiv*)) or aspd or "character disorder*" or (personalit* n5 disorder*))) or ab ((((aggressiv* or anxious* or borderline* or dependent* or eccentric* or emotional* or immature or passiv* or psychoneurotic or "psycho neurotic" or unstable) n5 personalit*) or (anal* n1 (personalit* or character* or retentiv*)) or aspd or "character disorder*" or (personalit* n5 disorder*)))
s38	(mh "personality disorders+")
s37	tx (parkinsoni* or "neuroleptic induc*" or psychiatric*) not ti ((parkinson* and disease))

s36	tx (((acathisi* or akathisi* or hebephrenic* or (neuroleptic* and ((malignant and syndrome) or (movement n2 disorder))) or oligophreni* or psychotic* or psychosis or psychoses or schizo* or (tardive* and dyskine*)) or (delusion* or hallucinat* or paranoi* or "thought disorder*")))
s35	(mh "psychotic disorders+")
s34	ti ((((bipolar or "bi polar") n5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) n5 cycl*) or hypomani* or mania* or manic* or "mixed episode*" or rcdb)) or ab ((((bipolar or "bi polar") n5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) n5 cycl*) or hypomani* or mania* or manic* or "mixed episode*" or rcdb))
s33	ti ((cyclothym* or depres* or dysthym* or (low n2 mood) or melanchol* or "seasonal affective disorder*")) or ab ((cyclothym* or depres* or dysthym* or (low n2 mood) or melanchol* or "seasonal affective disorder*"))
s32	ti (((affective or mood) n1 (disorder* or disturbance* or dysfunction*))) or ab (((affective or mood) n1 (disorder* or disturbance* or dysfunction*)))
s31	(mh "affective disorders+")
s30	ti ((anorexi* or bing* or bulimi* or (compulsive* n2 (eat* or vomit*)) or (eating n2 disorder*) or ednos or hyperorexia or "over eat*" or overeat* or ((forced or "self induc*" or selfinduc*) n2 (purg* or vomit*)) or (restrict* n2 eat*))) or ab ((anorexi* or bing* or bulimi* or (compulsive* n2 (eat* or vomit*)) or (eating n2 disorder*) or ednos or hyperorexia or "over eat*" or overeat* or ((forced or "self induc*" or selfinduc*) n2 (purg* or vomit*)) or (restrict* n2 eat*)))
s29	(mh "eating disorders management (iowa nic)")
s28	(mh "eating disorders+")
s27	ti (("acute stress" or asd or "combat neuros*" or "combat syndrome" or desnos or "extreme stress" or "flash back*" or flashback* or hypervigilan* or hypervigilen* or posttrauma* or "post trauma*" or (psycho* n1 (stress* or trauma*)) or ptsd or "railway spine" or (rape n2 trauma*) or "re experienc*" or reexperienc* or "stress disorder*" or "torture syndrome" or (traumatic n1 (neuros* or stress)) or (trauma* and (avoidance or death* or emotion* or grief or horror or nightmare* or "night mare*"))))) or ab (("acute stress" or asd or "combat neuros*" or "combat syndrome" or desnos or "extreme stress" or "flash back*" or flashback* or hypervigilan* or hypervigilen* or posttrauma* or "post trauma*" or (psycho* n1 (stress* or trauma*)) or ptsd or "railway spine" or (rape n2 trauma*) or "re experienc*" or reexperienc* or "stress disorder*" or "torture syndrome" or (traumatic n1 (neuros* or stress)) or (trauma* and (avoidance or death* or emotion* or grief or horror or nightmare* or "night mare*")))))

s26	(mh "stress, psychological") or (mh "critical incident stress")
s25	ti ((((anxiet* or anxious* or phobia* or phobic*) n2 (performance or social*)) or anthropophobi* socioanxi* or sociophobi* or ((blush* or sweat* or trembl*) n3 (anxiet* or anxious* or chronic* or excessiv* or fear* or severe)) or ((interpersonal or "inter personal" or social* or socio*) n2 (aversion* or aversiv* or confiden* or difficult* or disorder* or distress* or fear*)) or hyperhydrosis or hyperperspirat* or (hyper n1 (hydrosis or perspirat*)) or ((mute* or mutism) n2 (elective* or selective*)) or ((negative evaluation or speak*) n3 (anxiet* or anxious* or distress* or fear*)) or paruresis or (((personalit* or phobi* or social* or socio*) n2 avoid*) or "avoidant disorder") or ((phobi* or social) n2 neuros*) or "phobic disorder*" or (shy or shyness) or "specific phobia*")) or ab ((((anxiet* or anxious* or phobia* or phobic*) n2 (performance or social*)) or anthropophobi* socioanxi* or sociophobi* or ((blush* or sweat* or trembl*) n3 (anxiet* or anxious* or chronic* or excessiv* or fear* or severe)) or ((interpersonal or "inter personal" or social* or socio*) n2 (aversion* or aversiv* or confiden* or difficult* or disorder* or distress* or fear*)) or hyperhydrosis or hyperperspirat* or (hyper n1 (hydrosis or perspirat*)) or ((mute* or mutism) n2 (elective* or selective*)) or ((negative evaluation or speak*) n3 (anxiet* or anxious* or distress* or fear*)) or paruresis or (((personalit* or phobi* or social* or socio*) n2 avoid*) or "avoidant disorder") or ((phobi* or social) n2 neuros*) or "phobic disorder*" or (shy or shyness) or "specific phobia*"))
s24	ti ((phobi* or (fear* n4 birth*) or tokophob* or tocophob*)) or ab ((phobi* or (fear* n4 birth*) or tokophob* or tocophob*))
s23	ti panic* or ab panic*
s22	ti (("body dysmorphi*" or "clean* response*" or compulsion* or dysmorphophobi* or "imagine* ugl*" or obsession or obsessional or obsessions or "obsessive compulsive" or "obsess* ruminat*" or ocd or osteochondr* or (recurr* n1 thought) or scrupulosity or ((arrang* or check* or clean* or count* or hoard* or order* or repeat* or symmetr* or wash*) n1 compulsi*))) or ab (("body dysmorphi*" or "clean* response*" or compulsion* or dysmorphophobi* or "imagine* ugl*" or obsession or obsessional or obsessions or "obsessive compulsive" or "obsess* ruminat*" or ocd or osteochondr* or (recurr* n1 thought) or scrupulosity or ((arrang* or check* or clean* or count* or hoard* or order* or repeat* or symmetr* or wash*) n1 compulsi*)))
s21	(mh "compulsive behavior")
s20	(mh "body dysmorphic disorder")

s19	ti ((anxiet* or anxious* or ((chronic* or excessiv* or intens* or (long* n2 last*) or neuros* or neurotic* or ongoing or persist* or serious* or sever* or uncontrol* or "un control*" or unrelent* or "un relent*") n2 worry))) or ab ((anxiet* or anxious* or ((chronic* or excessiv* or intens* or (long* n2 last*) or neuros* or neurotic* or ongoing or persist* or serious* or sever* or uncontrol* or "un control*" or unrelent* or "un relent*") n2 worry)))
s18	(mh "shyness")
s17	(mh "mutism")
s16	(mh "hyperhidrosis+")
s15	(mh "anxiety disorders+")
s14	(mh "anxiety+") or (mh "anxiety (saba ccc)") or (mh "anxiety (nanda)") or (mh "anxiety control (iowa noc)") or (mh "anxiety reduction (iowa nic)")
s13	ti (((mental* or psychologic*) n2 (deficien* or disease* or disorder* or disturbance* or dysfunction* or health or illness* or problem*))) or ab (((mental* or psychologic*) n2 (deficien* or disease* or disorder* or disturbance* or dysfunction* or health or illness* or problem*)))
s12	(mh "mental disorders+") or (mh "mental disorders, chronic")
s11	s1 or s2 or s3 or s4 or s5 or s6 or s7 or s8 or s9 or s10
s10	ti ((antenatal* or "ante natal*" or antepart* or "ante part*" or birth* or breastfeed* or (breast n1 (feed* or fed)) or childbirth* or ((first or second or third) n2 trimester*) or labor or laboring or labour or labouring or lactat* or maternal* or newborn* or "new born*" or obstetric* or perinatal* or "peri natal*" or postbirth* or postpartum* or "post partum*" or postnatal* or "post natal*" or pregnan* or prenat* or "pre nat*" or puerperal* or puerperium* or wean* or weaning)) or ab ((antenatal* or "ante natal*" or antepart* or "ante part*" or birth* or breastfeed* or (breast n1 (feed* or fed)) or childbirth* or ((first or second or third) n2 trimester*) or labor or laboring or labour or labouring or lactat* or maternal* or newborn* or "new born*" or obstetric* or perinatal* or "peri natal*" or postbirth* or postpartum* or "post partum*" or postnatal* or "post natal*" or pregnan* or prenat* or "pre nat*" or puerperal* or puerperium* or wean* or weaning))
s9	(mh "prenatal care (iowa nic)") or (mh "prenatal diagnosis+")
s8	(mh "postnatal period+") or (mh "postpartal care (iowa nic)") or (mh "pregnancy+") or (mh "pregnancy complications+") or (mh "pregnancy, multiple+") or (mh "pregnancy trimesters+") or (mh "pregnancy, unwanted") or (mh "pregnancy, unplanned")
s7	(mh "pelvimetry")

s6	mw obstetric*
s5	(mh "maternal-child care+")
s4	(mh "maternal health services+")
s3	(mh "maternal-child nursing+")
s2	(mh "infant, newborn+")
s1	(mh "breast feeding+") or (mh "lactation suppression (iowa nic)") or (mh "lactation management (iowa nic)") or (mh "milk, human") or (mh "weaning")

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- #1 mesh descriptor: [breastfeeding] explode all trees
- #2 mesh descriptor: [infant, newborn] explode all trees
- #3 mesh descriptor: [maternal health services] explode all trees
- #4 mesh descriptor: [maternal-child nursing] explode all trees
- #5 mesh descriptor: [milk, human] this term only
- #6 mesh descriptor: [pelvimetry] this term only
- #7 mesh descriptor: [perinatal care] explode all trees
- #8 mesh descriptor: [peripartum period] this term only
- #9 mesh descriptor: [postpartum period] explode all trees
- #10 mesh descriptor: [parturition] this term only
- #11 mesh descriptor: [pregnancy] explode all trees
- #12 mesh descriptor: [pregnancy complications] explode all trees
- #13 mesh descriptor: [pregnancy, multiple] explode all trees
- #14 mesh descriptor: [prenatal care] this term only
- #15 mesh descriptor: [prenatal diagnosis] this term only
- #16 mesh descriptor: [pregnancy trimesters] explode all trees
- #17 mesh descriptor: [uterine monitoring] this term only
- #18 mesh descriptor: [weaning] this term only
- #19 obstetric*:kw
- #20 (antenatal* or "ante natal*" or antepart* or "ante part*" or birth* or breastfeed* or (breast near/1 (feed* or fed)) or childbirth* or ((first or second or third) near/2 trimester*) or labor or laboring or labour or labouring or lactat* or maternal* or newborn* or "new born*" or obstetric* or perinatal* or "peri natal*" or postbirth* or postpartum* or "post partum*" or postnatal* or "post natal*" or pregnan* or prenat* or "pre nat*" or puerperal* or puerperium* or wean* or weaning):ti

- #21 (antenatal* or "ante natal*" or antepart* or "ante part*" or birth* or breastfeed* or (breast near/1 (feed* or fed)) or childbirth* or ((first or second or third) near/2 trimester*) or labor or laboring or labour or labouring or lactat* or maternal* or newborn* or "new born*" or obstetric* or perinatal* or "peri natal*" or postbirth* or postpartum* or "post partum*" or postnatal* or "post natal*" or pregnan* or prenat* or "pre nat*" or puerperal* or puerperium* or wean* or weaning):ab
- #22 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21
- #23 mesh descriptor: [mental disorders] explode all trees
- #24 mesh descriptor: [mentally ill persons] this term only
- #25 ((mental* or psychologic*) near/2 (deficien* or disease* or disorder* or disturbance* or dysfunction* or health or illness* or problem*)):ti
- #26 ((mental* or psychologic*) near/2 (deficien* or disease* or disorder* or disturbance* or dysfunction* or health or illness* or problem*)):ab
- #27 mesh descriptor: [anxiety] this term only
- #28 mesh descriptor: [anxiety disorders] explode all trees
- #29 mesh descriptor: [blushing] this term only
- #30 mesh descriptor: [hyperhidrosis] explode all trees
- #31 mesh descriptor: [mutism] this term only
- #32 mesh descriptor: [shyness] this term only
- #33 (anxiet* or anxious* or ((chronic* or excessiv* or intens* or (long* near/2 last*) or neuros* or neurotic* or ongoing or persist* or serious* or sever* or uncontrol* or "un control*" or unrelent* or "un relent*") near/2 worry)):ti
- #34 (anxiet* or anxious* or ((chronic* or excessiv* or intens* or (long* near/2 last*) or neuros* or neurotic* or ongoing or persist* or serious* or sever* or uncontrol* or "un control*" or unrelent* or "un relent*") near/2 worry)):ab
- #35 mesh descriptor: [body dysmorphic disorders] this term only
- #36 mesh descriptor: [compulsive behavior] explode all trees
- #37 mesh descriptor: [obsessive behavior] this term only
- #38 ("clean* response*" or compulsion* or obsession* or ("obsessive compulsive" near/1 (disorder* or neuros*)) or ocd or osteochondr* or compulsion or (recurr* near/1 (obsession* or thought)) or "body dysmorphi*" or dysmorphophobi* or "imagine* ugl*" or "obsess* ruminat*" or scrupulosity or ((arrang* or check* or clean* or count* or hoard* or order* or repeat* or symmetr* or wash*) near/1 compulsi*)):ab
- #39 ("clean* response*" or compulsion* or obsession* or ("obsessive compulsive" near/1 (disorder* or neuros*)) or ocd or osteochondr* or compulsion or (recurr* near/1 (obsession* or thought)) or "body dysmorphi*" or dysmorphophobi* or "imagine* ugl*" or "obsess* ruminat*" or scrupulosity or ((arrang* or check* or clean* or count* or hoard* or order* or repeat* or symmetr* or wash*) near/1 compulsi*)):ti
- #40 mesh descriptor: [panic] this term only

- #41 panic*:ti
- #42 panic*:ab
- #43 (acrophob* or agoraphob* or claustrophob* or emetophob* or enfantaphob* or homophob* or infantaphob* or kinesiophob* or lesbophob* or neophob* or neurophob* or phobi* or transphob* or to?ophobi* or trypanophob* or xenophob* or ((acute* or chronic* or extreme* or intens* or irrational* or persistent* or serious*) near/2 fear*) or (fear* near/4 ("air travel" or animal* or birth* or blood* or buses or ((closed or public) near/2 space*) or childbirth* or crowd* or dark* or dental* or dentist* or dog* or dying or falls or falling or fly or flying or height* or hypochondriacal or injection* or injur* or laughed or "leaving home" or lightening or movement* or needle* or night* or panic* or plane* or pregnan* or reinjure* or school* or snake* or space* or spider* or test* or thunder* or tokophob* or tocophob* or train* or travel* or water)) or "specific fear*"):ti
- #44 (acrophob* or agoraphob* or claustrophob* or emetophob* or enfantaphob* or homophob* or infantaphob* or kinesiophob* or lesbophob* or neophob* or neurophob* or phobi* or transphob* or to?ophobi* or trypanophob* or xenophob* or ((acute* or chronic* or extreme* or intens* or irrational* or persistent* or serious*) near/2 fear*) or (fear* near/4 ("air travel" or animal* or birth* or blood* or buses or ((closed or public) near/2 space*) or childbirth* or crowd* or dark* or dental* or dentist* or dog* or dying or falls or falling or fly or flying or height* or hypochondriacal or injection* or injur* or laughed or "leaving home" or lightening or movement* or needle* or night* or panic* or plane* or pregnan* or reinjure* or school* or snake* or space* or spider* or test* or thunder* or tokophob* or tocophob* or train* or travel* or water)) or "specific fear*"):ab
- #45 (((anxiet* or anxious* or phobia* or phobic*) near/2 (performance or social*)) or anthropophobi* socioanxi* or sociophobi* or ((blush* or sweat* or trembl*) near/3 (anxiet* or anxious* or chronic* or excessiv* or fear* or severe)) or ((interpersonal or "inter personal" or social* or socio*) near/2 (aversion* or aversiv* or confiden* or difficult* or disorder* or distress* or fear*)) or hyperhydrosis or hyperperspirat* or (hyper near/1 (hydrosis or perspirat*)) or ((mute* or mutism) near/2 (elective* or selective*)) or ((negative evaluation or speak*) near/3 (anxiet* or anxious* or distress* or fear*)) or paruresis or (((personalit* or phobi* or social* or socio*) near/2 avoid*) or "avoidant disorder") or ((phobi* or social) near/2 neuros*) or "phobic disorder*" or (shy or shyness) or "specific phobia*"):ti
- #46 (((anxiet* or anxious* or phobia* or phobic*) near/2 (performance or social*)) or anthropophobi* socioanxi* or sociophobi* or ((blush* or sweat* or trembl*) near/3 (anxiet* or anxious* or chronic* or excessiv* or fear* or severe)) or ((interpersonal or "inter personal" or social* or socio*) near/2

- (aversion* or aversiv* or confiden* or difficult* or disorder* or distress* or fear*) or hyperhydrosis or hyperperspirat* or (hyper near/1 (hydrosis or perspirat*)) or ((mute* or mutism) near/2 (elective* or selective*)) or ((negative evaluation or speak*) near/3 (anxiet* or anxious* or distress* or fear*)) or paruresis or (((personalit* or phobi* or social* or socio*) near/2 avoid*) or "avoidant disorder") or ((phobi* or social) near/2 neuros*) or "phobic disorder*" or (shy or shyness) or "specific phobia*"):ab
- #47 mesh descriptor: [stress, psychological] this term only
- #48 ("acute stress" or asd or "combat neuros*" or "combat syndrome" or desnos or "extreme stress" or "flash back*" or flashback* or hypervigilan* or hypervigilen* or posttrauma* or "post trauma*" or (psycho* near/1 (stress* or trauma*)) or ptsd or "railway spine" or (rape near/2 trauma*) or "re experienc*" or reexperienc* or "stress disorder*" or "torture syndrome" or (traumatic near/1 (neuros* or stress)) or (trauma* and (avoidance or death* or emotion* or grief or horror or nightmare* or "night mare*"))):ti
- #49 ("acute stress" or asd or "combat neuros*" or "combat syndrome" or desnos or "extreme stress" or "flash back*" or flashback* or hypervigilan* or hypervigilen* or posttrauma* or "post trauma*" or (psycho* near/1 (stress* or trauma*)) or ptsd or "railway spine" or (rape near/2 trauma*) or "re experienc*" or reexperienc* or "stress disorder*" or "torture syndrome" or (traumatic near/1 (neuros* or stress)) or (trauma* and (avoidance or death* or emotion* or grief or horror or nightmare* or "night mare*"))):ab
- #50 mesh descriptor: [eating disorders] explode all trees
- #51 (anorexi* or bing* or bulimi* or (compulsive* near/2 (eat* or vomit*)) or (eating near/2 disorder*) or hyperorexia or "over eat*" or overeat* or ((forced or "self induc*" or selfinduc*) near/2 (purg* or vomit*)) or (restrict* near/2 eat*)):ti
- #52 (anorexi* or bing* or bulimi* or (compulsive* near/2 (eat* or vomit*)) or (eating near/2 disorder*) or hyperorexia or "over eat*" or overeat* or ((forced or "self induc*" or selfinduc*) near/2 (purg* or vomit*)) or (restrict* near/2 eat*)):ab
- #53 mesh descriptor: [depression] this term only
- #54 mesh descriptor: [mood disorders] explode all trees
- #55 ((affective or mood) near/1 (disorder* or disturbance* or dysfunction*)):ti
- #56 ((affective or mood) near/1 (disorder* or disturbance* or dysfunction*)):ab
- #57 (cyclothym* or depres* or dysthym* or (low near/2 mood) or melanchol* or "seasonal affective disorder*"):ti
- #58 (cyclothym* or depres* or dysthym* or (low near/2 mood) or melanchol* or "seasonal affective disorder*"):ab
- #59 (((bipolar or "bi polar") near/5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) near/5 cycl*) or hypomani* or mania* or manic* or "mixed episode*" or rcbd):ti

- #60 (((bipolar or "bi polar") near/5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) near/5 cycl*) or hypomani* or mania* or manic* or "mixed episode*" or rcbd):ab
- #61 mesh descriptor: [schizophrenia and disorders with psychotic features] this term only
- #62 mesh descriptor: [psychotic disorders] explode all trees
- #63 mesh descriptor: [schizophrenia] explode all trees
- #64 ((acathisi* or akathisi* or hebephrenic* or (neuroleptic* and ((malignant and syndrome) or (movement near/2 disorder)))) or oligophreni* or psychotic* or psychosis or psychoses or schizo* or (tardive* and dyskine*) or (delusion* or hallucinat* or paranoi* or "thought disorder*")):ti,ab,kw
- #65 (parkinsoni* or "neuroleptic induc"):ti,ab,kw
- #66 mesh descriptor: [personality disorders] explode all trees
- #67 (((aggressiv* or anxious* or borderline* or dependent* or eccentric* or emotional* or immature or passiv* or psychoneurotic or "psycho neurotic" or unstable) near/5 personalit*) or (anal* near/1 (personalit* or character* or retentiv*)) or aspd or "character disorder*" or (personalit* near/5 disorder*)):ti
- #68 (((aggressiv* or anxious* or borderline* or dependent* or eccentric* or emotional* or immature or passiv* or psychoneurotic or "psycho neurotic" or unstable) near/5 personalit*) or (anal* near/1 (personalit* or character* or retentiv*)) or aspd or "character disorder*" or (personalit* near/5 disorder*)):ab
- #69 (anankastic* or asocial* or avoidant* or antisocial* or "anti social*" or compulsiv* or dissocial* or histrionic* or narciss* or neuropsychopath* or obsessiv* or paranoi* or psychopath* or sadist* or schizoid* or schizotyp* or sociopath* or (moral near/2 insanity)):ti
- #70 (anankastic* or asocial* or avoidant* or antisocial* or "anti social*" or compulsiv* or dissocial* or histrionic* or narciss* or neuropsychopath* or obsessiv* or paranoi* or psychopath* or sadist* or schizoid* or schizotyp* or sociopath* or (moral near/2 insanity)):ab
- #71 ("cluster a" or "cluster b" or "cluster c" or (dsm and (axis and ii)) or (icd and (f60 or f61 or f62)) or ((anxious* or dramatic* or eccentric* or emotional* or fearful* or odd*) near/5 cluster*)):ti
- #72 ("cluster a" or "cluster b" or "cluster c" or (dsm and (axis and ii)) or (icd and (f60 or f61 or f62)) or ((anxious* or dramatic* or eccentric* or emotional* or fearful* or odd*) near/5 cluster*)):ab
- #73 mesh descriptor: [self-injurious behavior] this term only
- #74 mesh descriptor: [self mutilation] this term only
- #75 mesh descriptor: [suicide] this term only
- #76 mesh descriptor: [suicidal ideation] this term only
- #77 mesh descriptor: [suicide, attempted] this term only

- #78 (autoaggress* or "auto aggress*" or automutilat* or "auto mutilat*" or cutt* or overdose* or (self near/2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinfect* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or suicid*):ti
- #79 (autoaggress* or "auto aggress*" or automutilat* or "auto mutilat*" or cutt* or overdose* or (self near/2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinfect* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or suicid*):ab
- #80 mesh descriptor: [drug-seeking behavior] this term only
- #81 mesh descriptor: [substance-related disorders] explode all trees
- #82 alcohol* and (abstinence or detoxification or intoxicat* or rehabilit* or withdraw*):kw
- #83 alcoholi*:kw
- #84 (alcoholi* or drinker* or (drink* near/2 use*) or ((alcohol* or drink*) near/5 (abstinen* or abstain* or abus* or addict* or attenuat* or binge* or crav* or dependen* or detox* or disease* or disorder* or excessiv* or harm* or hazard* or heavy or "high risk" or intoxicat* or misus* or overdos* or "over dos*" or problem* or rehab* or reliance or reliant or relaps* or withdraw*)) or (control* near/2 drink*) or sobriet*):ti
- #85 (alcoholi* or drinker* or (drink* near/2 use*) or ((alcohol* or drink*) near/5 (abstinen* or abstain* or abus* or addict* or attenuat* or binge* or crav* or dependen* or detox* or disease* or disorder* or excessiv* or harm* or hazard* or heavy or "high risk" or intoxicat* or misus* or overdos* or "over dos*" or problem* or rehab* or reliance or reliant or relaps* or withdraw*)) or (control* near/2 drink*) or sobriet*):ab
- #86 cannabis or cocaine or hashish or heroin or marihuana or marijuana*:kw
- #87 ((acetomorphine or amphetamine* or amphetamine* or analeptic* or cannabis or cocaine or crack or crank or dextroamphetamine* or diacephine or diacetylmorphine or diacetylmorphine or diamorphin* or diamorphine or diaphorin or drug or methadone* or methamphetamine* or morfin* or morphacetin or morphin* or naltrexone or narcotic* or opioid* or opium or polydrug* or psychostimulant* or speed or stimulant* or stimulant* or substance or uppers) near/3 (abstain* or abstinen* or abus* or addict* or (excessive near/1 use*) or dependen* or (inject* near/2 drug*) or intoxicat* or misus* or "over dos*" or overdos* or (use* near/1 (disorder* or illicit)) or withdraw*)) or ((drug or substance) near/1 use*):ti
- #88 ((acetomorphine or amphetamine* or amphetamine* or analeptic* or cannabis or cocaine or crack or crank or dextroamphetamine* or diacephine or diacetylmorphine or diacetylmorphine or diamorphin* or diamorphine or diaphorin or drug or methadone* or methamphetamine* or morfin* or morphacetin or morphin* or naltrexone or narcotic* or

- opioid* or opium or polydrug* or psychostimulant* or speed or stimulant* or stimulant* or substance or uppers) near/3 (abstain* or abstin* or abus* or addict* or (excessive near/1 use*) or dependen* or (inject* near/2 drug*) or intoxicat* or misus* or "over dos*" or overdos* or (use* near/1 (disorder* or illicit)) or withdraw*) or ((drug or substance) near/1 use*):ab
- #89 #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54 or #55 or #56 or #57 or #58 or #59 or #60
- #90 #61 or #62 or #63 or #64 or #65 or #66 or #67 or #68 or #69 or #70 or #71 or #72 or #73 or #74 or #75 or #76 or #77 or #78 or #79 or #80 or #81 or #82 or #83 or #84 or #85 or #86 or #87 or #88
- #91 #89 or #90
- #92 #22 and #91

1.4 HMIC - HDAS Version 2

1. ((antenatal* or "ante natal" or antepart* or "ante part*" or birth* or breastfeed* or "breast feed" or "breast fed" or childbirth* or "child birth*" or trimester* or labor or laboring or labour or labouring or lactat* or maternal* or newborn* or "new born*" or perinatal* or "peri natal*" or obstetric* or postbirth* or postpartum* or "post partum" or postnatal* or "post natal*" or pregnan* or prenat* or "pre nat*" or puerperal* or or puerperium* or wean* or weaning) and (mental* or psycholog* or psychiat* or abus* or adict* or "affective disorder*" or alcoholi* or anorexi* or anxiet* or anxious* or automutilat* or bipolar or bulimia* or compulsiv* or depress* or "drug use" or "eating disorder*" or "mood disorder*" or obsessiv* or overdos* or panic* or "personality disorder*" or phobi* or psychos* or ptsd or schizopren* or "self harm*" or "self injur*" or "self mutilat*" or stress* or "substance misuse" or suicid* or tokophobi*)).af.

1.5 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP Version 2

1. exp prenatal development/ or child development/
2. 1 use emez
3. exp "embryonic and fetal development"/ use mesz
4. 3 use mesz
5. exp infant development/

6. (120 neonatal <birth to age 1 mo> or 140 infancy <2 to 23 mo>)
7. or/5-6 use psych
8. (baby or babies or congenital\$ or embryo\$ or f?etal or f?etus\$ or gestation or infant\$ or intra?uterin\$ or in\$1 uterus or in\$1 utero or neonat\$ or newborn\$ or un?born child\$).ti,ab,hw,id.
9. or/2,4,7-8

1.6 CINAHL - EBSCO host Version 2

1. (mh "infant development") or (mh "child development")
2. (mh "fetal development+")
3. tx (baby or babies or congenital* or embryo* or fetal or foetal or fetus* or foetus* or gestation or infant* or intrauterine* or "intra uterin*" or "in uterus" or "in utero" or neonat* or newborn* or "unborn child*" or "un born child*")
4. s1 or s2 or s3

1.7 Cochrane Library - Wiley Version 2

1. mesh descriptor: [embryonic and fetal development] explode all trees
2. (baby or babies or congenital* or embryo* or fetal or foetal or fetus* or foetus* or gestation or infant* or intrauterine* or "intra uterin*" or "in uterus" or "in utero" or neonat* or newborn* or "unborn child*" or "un born child*"):ti,ab,kw
3. #1 or #2

2. Question specific search strategies - all databases

2.1 Experience of care

- 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?

2.11 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

- "*attitude to health"/ or consumer/ or consumer attitude/ or *health care
 1 quality/ or patient attitude/ or *patient compliance/ or patient preference/
 or patient satisfaction/
 2 1 use emez
 *attitude to health/ or comprehensive health care/ or exp consumer
 3 participation/ or exp consumer satisfaction/ or "patient acceptance of health
 care"/ or patient care management/ or patient centered care/ or exp patient
 compliance/ or "quality of health care"/
 4 3 use mesz
 exp client attitudes/ or client satisfaction/ or exp health attitudes/ or client
 5 centered therapy/ or exp consumer attitudes/ or exp patient attitude/ or
 patient satisfaction/ or "quality of care"/ or treatment compliance/
 6 5 use psych
 ((adult\$ or attender\$ or client\$ or consumer\$ or customer\$ or individual\$ or
 maternal\$ or mother\$ or patient\$ or people\$ or person\$ or women or user\$)
 adj3 (account\$ or anxieties or atisfact\$ or attitude\$ or barriers or belief\$ or
 7 buyin or buy in\$1 or choice\$ or co?operat\$ or co operat\$ or expectation\$ or
 experienc\$ or feedback or feeling\$ or idea\$ or inform\$ or involv\$ or opinion\$
 or participat\$ or perceive\$ or (perception\$ not speech perception) or
 perspective\$ or preferen\$ or prepar\$ or priorit\$ or satisf\$ or view\$ or voices
 or worry)).ti,ab.
 8 ((consumer or patient) adj2 (focus* or centered or centred)).ti,ab.
 9 or/2,4,6-8
 ((APMH population terms version 1 AND qualitative systematic review
 study design filter terms))
 10 or (9 AND (primary qualitative study design filter terms OR survey study
 design filter terms terms))

2.12 CINAHL - Ebsco host

S11	((APMH population terms version 1 AND qualitative systematic review study design filter terms)) or (S10 AND (primary qualitative study design filter terms OR survey study design filter terms terms))
S10	S1 or s2 or s3 or s4 or s5 or s6 or s7 or s8 or s9
S9	ti (((consumer or patient) n2 (focus* or centered or centred))) or ab (((consumer or patient) n2 (focus* or centered or centred)))

S8	ti (((adult* or attender* or client* or consumer* or customer* or individual* or maternal* or mother* or patient* or people* or person* or women or user*) n3 (account* or anxieties or atifact* or attitude* or barriers or belief* or buyin or "buy in*" or choice* or co operat* or "co operat*" or expectation* or experienc* or feedback or feeling* or idea* or inform* or involv* or opinion* or participat* or perceive* or (perception* not speech perception) or perspective* or preferen* or prepar* or priorit* or satisf* or view* or voices or worry))) or ab (((adult* or attender* or client* or consumer* or customer* or individual* or maternal* or mother* or patient* or people* or person* or women or user*) n3 (account* or anxieties or atifact* or attitude* or barriers or belief* or buyin or "buy in*" or choice* or cooperat* or "co operat*" or expectation* or experienc* or feedback or feeling* or idea* or inform* or involv* or opinion* or participat* or perceive* or (perception* not speech perception) or perspective* or preferen* or prepar* or priorit* or satisf* or view* or voices or worry)))
S7	(mh "consumer satisfaction") or (mh "patient satisfaction")
S6	(mh "quality of health care")
S5	(mh "patient compliance+")
S4	(mh "patient centered care")
S3	(mh "consumer attitudes")
S2	(mh "consumer participation")
S1	(mh "attitude to health")

2.2 Case identification and assessment

<p>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?</p> <p>3.2 What are the most appropriate methods/ instruments for the identification of mental health problems in women who are antenatal or postnatal?</p> <p>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)??</p> <p>Consider:</p> <ul style="list-style-type: none"> • 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.

3.4 What strategies should be adopted to minimise potential harm to the women or the fetus/infant of these assessments?

2.21 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

1 checklist/ or clinical assessment tool/ or clinical assessment/ or clinical evaluation/ or exp computer assisted diagnosis/ or exp diagnostic test/ or functional assessment/ or geriatric assessment/ or mass screening/ or measurement/ or needs assessment/ or newborn screening/ or exp nursing assessment/ or outcome assessment/ or patient assessment/ or predictive value/ or prenatal screening/ or exp psychological test/ or psychometry/ or rating scale/ or risk assessment/ or scoring system/ or screening test/ or self evaluation/ or semi structured interview/ or "speech and language assessment"/ or structured interview/ or structured questionnaire/ or summated rating scale/

2 1 use emez

3 checklist/ or exp diagnosis, computer-assisted/ or diagnostic tests, routine/ or diagnostic, self evaluation/ or geriatric assessment/ or interview, psychological/ or mass screening/ or needs assessment/ or neonatal screening/ or exp nursing assessment/ or "outcome and process assessment (health care)"/ or "outcome assessment (health care)"/ or exp personality assessment/ or "predictive value of tests"/ or prenatal diagnosis/ or exp psychiatric status rating scales/ or exp psychological tests/ or exp questionnaires/ or risk assessment/

4 3 use mesz

5 attitude measurement/ or exp attitude measures/ or comprehension tests/ or computer assisted diagnosis/ or geriatric assessment/ or group testing/ or individual testing/ or exp inventories/ or measurement/ or needs assessment/ or exp perceptual measures/ or performance tests/ or exp personality measures/ or exp preference measures/ or prenatal diagnosis/ or pretesting/ or professional examinations/ or exp psychiatric evaluation/ or exp psychodiagnostic interview/ or exp psychological assessment/ or psychometrics/ or exp questionnaires/ or exp rating scales/ or exp reading measures/ or exp retention measures/ or risk assessment/ or exp screening tests/ or exp selection tests/ or self evaluation/ or sensorimotor measures/

- or sociometric tests/ or "speech and hearing measures"/ or standardized tests/ or subtests/ or symptom checklists/ or exp testing/ or testing methods/ or exp test scores/ or verbal tests/
- 6 5 use psych
(index or instrument\$ or interview\$ or inventor\$ or item\$ or measure\$1 or
7 questionnaire\$ or rate\$ or rating or scale\$ or score\$ or screen\$ or (self adj
(assess\$ or report\$)) or subscale\$ or survey\$ or test\$ or tool\$).tw.
- 8 or/2,4,6-7
- 9 di.fs. or exp diagnosis/ or exp mass screening/ or screening test/
- 10 9 use emez
- 11 di.fs. or exp diagnosis/ or mass screening/ or nursing diagnosis/
- 12 11 use mesz
- 13 exp diagnosis/ or exp health screening/ or screening/ or exp screening tests/
- 14 13 use psych
(assess\$ or detect\$ or diagnos\$ or evaluat\$ or identif\$ or psychodiagnos\$ or recogni\$ or screen\$).tw.
- 15 or/10,12,14-15
- 17 (8 and 16) or (casefind\$ or ((case or tool\$) adj (find\$ or identif\$))).tw.
"area under the curve"/ or predictive validity/ or receiver operating
18 characteristic/ or reliability/ or "sensitivity and specificity"/ or test retest reliability/ or validity/
- 19 18 use emez
- 20 "area under curve"/ or "predictive value of tests"/ or "reproducibility of results"/ or roc curve/ or "sensitivity and specificity"/ or validation studies/
- 21 20 use mesz
- 22 statistical reliability/ or statistical validity/ or test reliability/ or test validity/
- 23 22 use psych
(accurac\$ or accurat\$ or area under curve or auc value\$ or (likelihood adj3 ratio\$) or (diagnostic adj2 odds ratio\$) or ((pretest or pre test or posttest or
24 post test) adj2 probabilit\$) or (predict\$ adj3 value\$) or receiver operating characteristic or (roc adj2 curv\$) or reliabil\$ or sensitiv\$ or specificit\$ or valid\$).tw.
- 25 or/19,21,23-24
- 26 (antenatal psychosocial health assessment or antenatal psycho social health assessment).tw.
- 27 antenatal risk questionnaire\$.tw.

- 28 (bromley adj (postnatal or post natal) adj depression scale).tw.
- 29 (edinburgh adj (postnatal or post natal) adj depression scale).tw.
- 30 (maternal adj (antenatal or ante natal) adj attachment scale).tw.
- 31 ((postpartum or post partum) adj depression screening scale).tw.
- 32 (pregnancy anxiety scale or pregnancy related anxiety scale).tw.
- 33 or/26-32
- 34 beck anxiety inventory.tw.
- 35 beck depression inventory.tw.
- 36 (center adj2 epidemiologic studies adj2 depression adj2 (instrument or scale)).tw.
- 37 diagnostic interview schedule.tw.
- 38 (eysenck personality adj (questionnaire or scale\$)).tw.
- 39 general health questionnaire.tw.
- 40 ((hamilton rating scale adj2 depression) or hamilton depression scale).tw.
- 41 (hospital anxiety adj2 depression scale).tw.
- 42 (impact adj2 events scale).tw.
- 43 (inventory adj2 depressive symptomatology).tw.
- 44 kessler psychological distress scale.tw.
- 45 lahore inventory.tw.
- 46 leverton questionnaire.tw.
- 47 montgomery asberg.tw.
- 48 mood disorder questionnaire.tw.
- 49 patient health questionnaire.tw.
- 50 present state examination.tw.
- 51 (social support adj (questionnaire or scale)).tw.
- 52 (schedules for clinical assessment adj2 neuropsychiatry).tw.
- 53 dyadic adjustment scale.tw.
- 54 ((state or state trait or strait trait or strait or trait) adj anxiety adj (inventory or scale)).tw.
- 55 (structured clinical interview adj2 dsm\$).tw.
- 56 (traumatic events adj (questionnaire or scale)).tw.
- 57 whooley question\$.tw.
- 58 zung self-rating depression scale.tw.
- 59 (anrq or bpds or epds or maas or cds d or cesd or ces d or ghq12 or hrsd or hamd or ham d or hads or madrs or phq9 or phq 9 or scid).tw.

60 ((alpha or pdss or pas or bai or bai or bdi or bdil or bdi ll or bdill or dis or epq or ghq or ies or iesr or ids or idssr or qids or k10 or lq or mdq or phq or pse or pss or psss or sss or scan or sas or stai or tai or tes or teq or sds) adj5 (inventor\$ or questionnaire\$ or scale\$ or schedule\$)).tw.
61 (((17 and 25) or or/34-60) and [APMH population terms - version 1]) or 33

2.3 Interventions for the treatment of mental health problems

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?

2.31 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

1 fetus death/ or stillbirth/
2 1 use emez
3 fetal death/ or stillbirth/
4 3 use mesz
5 ((fetus or infant or perinatal) and (death or dying)).hw.
6 5 use psyh
(((baby or birth\$ or born\$ or child\$ or f?etal or f?etus or infant\$ or newborn\$ or neonat\$ or new born\$ or perinatal\$ or peri natal\$) adj3 (dead or death\$ or die\$1 or fatal\$ or lose or losing or lost or mortal\$)) or perinatal\$ loss or peri natal\$ loss or (still adj2 (birth\$ or born\$)) or silent bab\$ or stillbirth\$ or stillborn\$).ti,ab.
8 or/2,4,6-7
9 human relation/ or parental contact/ or mother child relation/ or touch/ or parent child relation/
10 9 use emez
11 mother child relations/ or interpersonal relations/ or parent child relations/ or touch/
12 11 use mesz
13 Interpersonal\$.hw. or mother child relations/ or parent child relations/ or physical contact/ or tactual perception/
14 13 use psyh
15 (cradle or holding).ti,ab.

- 16 (((contact\$ or cradl\$ or handl\$ or held\$ or hold\$ or meet\$ or saw or see\$ or touch\$ or view\$) adj3 (baby or birth\$ or born\$ or f?etal or f?etus or infant\$ or newborn\$ or neonat\$ or new born\$ or perinatal\$ or peri natal\$)) or (say\$ adj2 goodbye\$)).ti,ab.
- 17 or/10,12,14-16
- 18 8 and 17

2.32 CINAHL - Ebsco Host

- 1 (mh "infant death") or (mh "perinatal death")
- 2 (((baby or birth* or born* or child* or fetal or foetal or fetus or foetus or infant* or newborn* or neonat* or "new born*" or perinatal* or "peri natal*") n3 (dead or death* or die* or fatal* or lose or losing or lost or mortal*)) or "perinatal* loss" or "peri natal* loss" or (still n2 (birth* or born*)) or "silent bab*" or stillbirth* or stillborn*)
- 3 s1 or s2
- 4 (mh "adult-child relations") or (mh "interpersonal relations") or (mh "mother-child relations") or (mh "parent child relations") or (mh "touch (iowa nic)") or (mh "touch"))
- 5 mj (cradle or holding)
- 6 (((contact* or cradl* or handl* or held* or hold* or meet* or saw or see* or touch* or view*) n3 (baby or birth* or born* or fetal or foetal or fetus or foetus or infant* or newborn* or neonat* or "new born*" or perinatal* or "peri natal*")) or (say* near/2 goodbye*))
- 7 s4 or s5 or s6
- 8 s3 and s7

2.33 Cochrane Library - Wiley

- 1 mesh descriptor: [fetal death] this term only
- 2 mesh descriptor: [stillbirth] this term only
- 3 (((baby or birth* or born* or child* or fetal or foetal or fetus or foetus or infant* or newborn* or neonat* or "new born*" or perinatal* or "peri natal*") near/3 (dead or death* or die* or fatal* or lose or losing or lost or mortal*)) or "perinatal* loss" or "peri natal* loss" or (still near/2 (birth* or born*)) or "silent bab*" or stillbirth* or stillborn*)
- 4 #1 or #2 or #3
- 5 mesh descriptor: [mother-child relations] explode all trees
- 6 mesh descriptor: [parent-child relations] this term only

- 7 mesh descriptor: [interpersonal relations] this term only
- 8 mesh descriptor: [touch] this term only
- 9 mj (cradle or holding)
(((contact* or cradl* or handl* or held* or hold* or meet* or saw or see* or touch* or view*) near/3 (baby or birth* or born* or fetal or foetal or fetus or foetus or infant* or newborn* or neonat* or "new born*" or perinatal* or "peri natal*")) or (say* near/2 goodbye*))
- 10
- 11 #5 or #6 or #7 or #8 or #9 or #10
- 12 #4 and #11

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?

2.34 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

Search 1

- 1 antidepressant agent/ use emez
- 2 antidepressive agents/ or serotonin uptake inhibitors/ or monoamine oxidase inhibitors/
- 3 2 use mesz
- 4 antidepressant drugs/ or serotonin reuptake inhibitors/ or monoamine oxidase inhibitors/
- 5 4 use psych
- 6 (tricyclic\$ or tca\$1).ti,ab.
- 7 (ssri\$ or ((serotonin or 5 ht or 5 hydroxytryptamine) adj (uptake or reuptake or re uptake) adj inhibit\$)).ti,ab.
- 8 (antidepress\$ or anti depress\$ or maoi\$1 or ((adrenaline or amine or mao or mono amin\$ or monoamin\$ or tyramin\$) adj2 inhibit\$)).ti,ab.
(snri\$ or ssnri\$ or ((noradrenalin or norepinephrine) adj serotonin adj (uptake or reuptake or re uptake) adj inhibitor\$) or (serotonin adj (noradrenalin or norepi- nephrine) adj (uptake or reuptake or re uptake) adj inhibitor\$)).ti,ab.
- 9

- (agomelatin\$ or amitriptylin\$ or citalopram or clomipramin\$ or dosulepin or dothiepin or doxepin or duloxetine\$ or escitalopram or fluoxetine\$ or
10 flupentixol or flupenthixol or fluvoxamin\$ or imipramin\$ or isocarboxazid
or lofepramin\$ or mianserin or mirtazapin\$ or moclobemid\$ or nortriptylin\$
or paroxetine\$ or phenelzin\$ or phenothiazin\$ or reboxetin\$ or sertraline\$ or
tranylcypromin\$ or trazodon\$ or trimipramin\$ or venlafaxin\$).ti,ab,hw.
- 11 or/1,3,5-10
- 12 neuroleptic agent/ use emez
- 13 antipsychotic agents/ use mesz
- 14 neuroleptic drugs/ use psych
- 15 (antipsychotic\$ or anti psychotic\$ or (major adj2 (butyrophenon\$ or
phenoth- iazin\$ or tranquil\$)) or neuroleptic\$).ti,ab.
- 16 (benzamide\$ or butrophenone\$ or diphenylbutylpiperidine\$ or
phenothiazine\$).ti,ab.
- (amisulprid\$ or aripiprazole or asenapin\$ or benperidol or chlorpromazin\$
or clozapin\$ or flupentixol or fluphenazin\$ or haloperidol or
levomepromazin\$ or methotrimeprazin\$ or olanzapin\$ or paliperidon\$ or
17 pericyazin\$ or periciazin\$ or perphenazin\$ or pimozide or pipotiazin\$ or
pipothiazin\$ or prochlorperazin\$ or promazin\$ or propericiazin\$ or
quetiapin\$ or risperidon\$ or sulphiride or trifluoperazin\$ or trifluoperaz or
zuclopentixol or zuclopenthixol).ti,ab,hw.
- 18 or/12-17
- 19 antihistaminic agent/ use emez
- 20 histamine antagonists/ use mesz
- 21 antihistaminic drugs/ use psych
- 22 (antihistamin\$ or anti histamin\$ or (histamin\$ adj2 (antagonist\$ or
block\$))).ti,ab.
- 23 promethazin\$.ti,ab,hw.
- 24 or/19-23
- 25 anticonvulsive drugs/ use psych
- 26 anticonvulsive agent/ use emez
- 27 anticonvulsants/ use mesz
- 28 (anticonvuls\$ or anti convuls\$ or antiepilept\$ or anti epilep\$).ti,ab.
- (carbamazepin\$ or eslicarbazepin\$ or ethosuximide or lamotrigin\$ or
29 oxcarbazepin\$ or phenytoin or primidon\$ or rufinamid\$ or topiramate or
vigabatrin).ti,ab,hw.
- 30 or/25-29
- 31 hypnotic agent/ use emez

- 32 "hypnotics and sedatives"/ use mesz
- 33 hypnotic drugs/ use psych
- 34 hypnotic\$.ti,ab. or (zopiclon\$ or zolpidem or zaleplon).ti,ab,hw.
- 35 or/31-34
- 36 benzodiazepine derivative/ use emez
- 37 benzodiazepines/ use mesz,psych
- 38 (benzo\$1 or benzodiazepin\$).ti,ab.
- 39 sedative agent/ use emez
- 40 sedatives/ use psych
- 41 tranquilizing drugs/ use psych
- 42 (sedative\$ or tranquili\$).ti,ab.
- 43 (alprazolam or buspiron\$ or chlordiazepoxid\$ or diazepam or lorazepam or oxazepam).ti,ab,hw.
- 44 or/36-43
- 45 anxiolytic agent/ use emez
- 46 anti-anxiety agents/ use mesz
(((antianxiety or anti anxiety or ataractic) adj2 (agent\$ or drug\$ or treat\$)) or
- 47 anxiolytic\$ or ((medium or minor) adj2 tranquil\$) or (serotonergic adj
(agent\$ or drug\$ or preparation\$))).ti,ab.
- 48 meprobamate.ti,ab,hw.
- 49 or/45-48
- 50 central stimulant agent/ use emez
- 51 central nervous system stimulants/ use mesz
- 52 cns stimulating drugs/ use psych
- 53 stimulant\$.ti,ab.
- 54 (atomoxetin\$ or dexamfetamin\$ or dextroamphetamin\$ or
methylphenidate).ti,ab,hw.
- 55 or/50-54
- 56 (carbamazepin\$ or hypericum or lithium\$ or st john\$ wart or valproate or
valproic acid).ti,ab,hw.
(acamprosate or baclofen or buprenorphin\$ or carbamazepin\$ or
- 57 chlordiazepoxide or chlormethiazole or clomethiazole or clonidin\$ or
disulfiram or lofexidin\$ or methadone or naltrexon\$).ti,ab,hw.
- 58 psychotropic\$.ti,ab.
- 59 or/56-58
- 60 or/11,18,24,30,35,44,49,55,59

- exp newborn disease/ use emez or exp pregnancy disorder/ use emez or
exp prenatal disorder/ use emez or exp "congenital, hereditary, and
61 neonatal diseases and abnormalities"/ use mesz or exp pregnancy
complications/ use mesz or exp congenital disorders/ use psych or exp
neonatal disorders/ use psych
((baby or babies or congenital\$ or embryo\$ or fetal\$ or fetus\$ or gestation
or infant\$ or intrauterine\$ or in\$1 uterus or in\$1 utero or neonate\$ or
62 newborn\$ or unborn child\$) adj3 (abnormal\$ or anomaly\$ or defect\$ or
deficiency\$ or deform\$ or disease\$ or disorder\$ or dysfunction\$ or instability\$
or malform\$ or problem\$ or syndrome\$)) or (development\$ adj3 (defect\$ or
deformity\$ or malform\$)).ti,ab.
- 63 agranulocytosis/ use emez,mesz
64 (agranulocytosis or granulopenia or panleukopenia).ti,ab.
65 cleft palate/ use emez,mesz,psych
66 (((cleft or jaw) adj2 palatal\$) or palatalschisis or palatum fissum).ti,ab.
67 cleft face/ use emez
68 (cleidofacial dysplasia or ((face or facial) adj3 cleft) or schizoprosopia or
schizoprosopia).ti,ab.
69 crying/ use emez,mesz,psych
70 ((constant\$ or continue\$ or incessant or regular or ongoing or perpetual or
persist\$ or recur\$) adj2 cry\$).ti,ab.
71 febrile convulsion/ use emez or seizure/ use emez or seizures, febrile/ use
mesz or seizures/ use mesz or seizures/ use psych
72 (convuls\$ or epilep\$ or seizure\$).ti,ab.
73 exp diabetes mellitus/ use emez,mesz or exp diabetes/ use psych
74 nephrogenic diabetes insipidus/ use emez or diabetes insipidus,
nephrogenic/ use mesz or exp hypoglycemia / use emez,mesz, psych
75 (diabet\$ or hypoglycaemia\$).ti,ab.
76 exp extrapyramidal syndrome/ use emez or exp basal ganglia diseases/ use
mesz or extrapyramidal symptoms/ use psych
(((basal adj (ganglia or ganglion)) or extrapyramidal) adj2 (abnormal\$ or
77 anomaly\$ or defect\$ or deficiency\$ or deform\$ or disease\$ or disorder\$ or
disturbance or dysfunction\$ or instability\$ or malform\$ or problem\$ or
syndrome\$)).ti,ab.
78 exp face malformation/ use emez or facial hemiatrophy/ use mesz
(((face or facial or hemifacial\$) adj (atrophy\$ or dysmorph\$ or hemiatrophy\$ or
79 abnormal\$ or anomaly\$ or defect\$ or deficiency\$ or deform\$ or disease\$ or
disorder\$ or disturbance or dysfunction\$ or instability\$ or malform\$ or
problem\$ or syndrome\$)) or romberg\$).ti,ab.

- 80 infantile hypotonia/ use emez
- 81 (floppy adj2 (baby or babies or child\$ or infant\$)).ti,ab.
- 82 exp muscle hypertonia/ use emez,mesz
- 83 (hypertonia or hypertonus or (muscl\$ adj2 (atonic or contract\$ or flaccid\$ or hyperton\$ or (poor\$ adj2 tone) or rigid\$ or stiff\$)) or spastic\$).ti,ab.
- 84 hypothermia/ use emez,mesz,psych
- 85 hypotherm\$.ti,ab.
- 86 irritability/ use emez,psych or irritable mood/ use mesz
- 87 irritab\$.ti,ab.
- 88 nervousness/ use emez, psych
- 89 (jitter\$ or nervosity or nervous\$).ti,ab.
- exp high birth weight/ use emez or exp low birth weight/ use emez or
- 90 *birth weight/ use mesz or exp infant, low birth weight/ use mesz or weight gain/ use emez, mesz, psych
- 91 (((high or low) adj birth?weight) or ((lbw or over?weight or under?weight) adj2 (infant\$ or neonat\$ or newborn\$))).ti,ab.
- 92 infantile spasm/ use emez or seizures/ use mesz or exp seizures/ use psych (flexor spasm or ((infant\$ or neonat\$) adj2 (seizure\$ or spasms or spasmus))
- 93 or jack knife seizure or minor motor epilepsy or (myoclonic adj2 infant\$ adj2 encephalopathy) or propulsive petit mal or spasm in\$1 flexion).ti,ab.
- 94 exp neural tube defect/ use emez or exp neural tube defects/ use mesz (dysraphia or dysraphic or dysraphism or dysraphy or (neural tube adj2
- 95 (closure or defect\$ or malform\$)) or (spina\$ adj (dysraphism or bifida))).ti,ab.
- 96 feeding disorder/ use emez
- 97 ((poor adj2 feed\$) or failure to thrive).ti,ab.
- 98 premature birth/ or premature labor/ use emez or premature birth/ use mesz (anoxia or asphyxia or hypoxia or ((premature or pre?term) adj2 (baby or
- 99 birth\$ or deliver\$ or child\$ or infant\$ or labour\$ or labor\$ or neonat\$ or newborn\$)) or prematurity).ti,ab.
- exp "eclampsia and preeclampsia"/ use emez or exp pulmonary
- 100 hypertension/ use emez or exp hypertension, pulmonary/ use mesz or exp Hypertension, Pregnancy-Induced/ use mesz or hypertension/ use psych
- 101 (hypertens\$ or (persistent f?etal adj3 circulation) or pre?eclamp\$).ti,ab.
- 102 prolactin/ use emez,mesz,psych
- 103 ((ferolactan or galactin or lactogen\$ or lactotrophic or lactotropic or lactotropin or lth or luteotrope or luteotrophic or luteotrophin\$ or

- luteotropic or luteotropin or mammatropic or mammotropin\$ or nin pd 3 or nin pd3 or prl or prolactin\$) adj3 (elevat\$ or heighten\$ or high\$ or increas\$ or rais\$).ti,ab.
- 104 expl respiratory distress syndrome/ use emez or exp respiratory distress syndrome/ use mesz or exp respiratory distress/ use psych
- 105 ((respirat\$ adj2 (depress\$ or distress\$ or inhibit\$ or insuffic\$)) or rds).ti,ab.
- 106 restlessness/ use emez,psych or psychomotor agitation/ use mesz
- 107 (agitat\$ or restless\$).ti,ab.
- 108 sedation/ use emez or consious sedation/ use mesz or deep sedation/ use mesz or sedatives/ use psych
- 109 sedat\$.ti,ab.
- 110 seizure/ use emez or seizures, febrile/ use emez or seizures/ use mesz or seizures, febrile/ use mesz or seizures/ use psych
- 111 (seizur\$ or ((epilep\$ or febril\$ or fever or pyrexial) adj3 (attack\$ or convuls\$ or fit\$ or insult))).ti,ab.
- 112 shivering/ use emez,mesz or “thermoregulation (body)” /
- 113 shiver\$.ti,ab.
- 114 spontaneous abortion/ use emez,psych or exp abortion, spontaneous/ use mesz
- 115 ((spontaneous adj2 abort\$) or ((loss\$ or lose) adj2 (baby or embryo or neonat\$)) or miscar\$ or mis car\$).ti,ab.
- 116 stevens-johnson syndrome/ use emez,mesz
- 117 ((ectodermosis adj3 pluriorificial\$) or (erythema adj3 multiforme) or rend\$ fiessinger or (steven\$ adj3 johnson)).ti,ab.
- teratogenicity/ use emez or exp teratogenic agent/ use emez or
- 118 abnormalities, drug-induced/ use mesz or exp teratogens/ use mesz or teratogens/ use psych
- 119 teratogen\$.ti,ab.
- 120 exp tremor/ use emez,mesz,psych
- 121 (tremor\$ or tremulousness).ti,ab.
- 122 weight gain/ use emez,mesz,psych
- 123 ((body size or weight\$) adj2 (gain\$ or increas\$ or put\$ on\$1)).ti,ab.
- 124 apgar score/ use emez,mesz
- ((abnormal\$ or anomal\$ or decreas\$ or defect\$ or deficien\$ or disorder\$ or
- 125 disturbance\$ or dysfunction\$ or fall\$ or instabilt\$ or low or instabilit\$ or problem\$ or reduc\$) adj2 apgar\$).ti,ab.
- 126 cleft lip palate/ use emez or cleft lip/ use emez,mesz

- 127 (cheiloschisis or ((cleft\$ or hare) adj2 lip\$) or harelip\$ or labioschi?is or labiopalatoschisis or palatolabioschisis).ti,ab.
withdrawal syndrome/ use emez or neonatal abstinence syndrome/ or exp
- 128 substance withdrawal syndrome/ use mesz or exp drug withdrawal/ use psyh
- 129 (((abstain\$ or abstinence or passive addiction\$ or with draw\$ or withdrawal\$) adj3 (neonat\$ or syndrom\$ or symptom\$)) or craving).ti,ab.
cognitive defect/ use emez or exp cognition disorders/ use mesz or
- 130 cognitive impairment/ use psyh or (motor performance or motor skills or motor processes).sh.
(((cogniti\$ or emotion\$) adj3 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or disabilit\$ or disorder\$ or dysfunction\$ or impair\$ or problem\$ or reduc\$)) or (motor adj (function\$ or performanc\$ or process\$ or skill\$)) or response interference).ti,ab.
- 131
- 132 brain size/ use emez,psyh or *cerebral cortex/ use mesz or *brain/ use mesz or brain weight/ use psyh
- 133 ((circumference or decreas\$ or reduc\$ or small\$) adj2 (brain\$ or head or sub?cortical)).ti,ab.
- 134 hypospadias\$.ti,ab,hw.
(((digit\$ or ear or face or finger\$ or hand\$1 or mouth or neck) adj3 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or disabilit\$ or disorder\$ or dysfunction\$ or hypoplasia or impair\$ or malform\$ or missing or problem\$)) or perodactylia).ti,ab.
- 135
- 136 (serotonin/ae, to use emez or (serotonin\$.hw. and to.fs. use mesz) or (serotonin/ and toxicity/ use psyh)]
- 137 (serotonin and (harm\$ or poison\$ or toxic\$)).ti,ab,hw.
- 138 exp cardiovascular disease/ use emez or exp cardiovascular diseases/ use mesz or exp cardiovascular disorders/ use psyh
(((atrial\$ or aorta or cardiac\$ or cardiovasc\$ or coronar\$ or heart\$ or myocard\$ or pulmonar\$ or vascular\$ or ventricular) adj5 (abnormal\$ or angio?plast\$ or anomal\$ or bypass\$ or coarctation or defect\$ or deficien\$ or deform\$ or disease\$ or disabilit\$ or disorder\$ or disturbance\$ or dysplasi\$ or dysfunction\$ or hypertrop\$ or impair\$ or infarct\$ or instabilit\$ or isch?emi\$ or malform\$ or problem\$ or syndrome\$ or thrombo\$)) or arteriosus or cardio?path\$ or echo?cardio\$ or (heart\$ adj2 (block or distress\$ or failure)) or hypertens\$ or ((holt oram or leopard or (mckusick adj2 kaufman)) adj2 (diseas\$ or syndrom\$))).ti,ab.
- 139
- 140 exp gastrointestinal disease/ use emez or exp gastrointestinal diseases/ use mesz or exp gastrointestinal disorders/ use psyh

- ((alimentary tract or gastro?ent\$ or gastro?intestin\$) adj5 (abnormal\$ or
141 anomal\$ or defect\$ or deficien\$ or deform\$ or disease\$ or disorder\$ or
dysfunction\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)).ti,ab.
- 142 exp kidney disease/ use emez or exp kidney diseases/ use mesz, psych
((kidney or renal) adj3 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or
143 deform\$ or disabilit\$ or disease\$ or disorder\$ or disturbance\$ or
dysfunction\$ or impair\$ or instabilit\$ or malform\$ or problem\$ or
syndrome\$)).ti,ab.
- 144 exp thyroid disease/ use emez or congenital hypothyroidism/ use mesz or
exp thyroid diseases/ use mesz or exp thyroid disorders/ use psych
((thyroid\$ adj5 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or
145 disabilit\$ or disease\$ or disorder\$ or disturbance\$ or dysfunction\$ or
impair\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)) or cretin\$ or
hyperthyroid\$)).ti,ab.
- 146 exp "disorders of carbohydrate metabolism"/ use emez or exp glucose
metabolism disorders/ use mesz or glucose metabolism/ use psych
((carboxylase or carobohydrate or glucos\$ or holocarboxylase) adj5
147 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or disabilit\$ or
disease\$ or disorder\$ or disturbance\$ or dysfunction\$ or error\$ or impair\$
or instabilit\$ or malform\$ or problem\$ or syndrome\$)) or cdg syndrome\$ or
mckusick)).ti,ab.
- 148 exp "disorders of lipid and lipoprotein metabolism"/ use emez or exp lipid
metabolism disorders/ use mesz,psych
(lipid\$ adj5 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or disease\$ or
149 disorder\$ or disturbance\$ or dysfunction\$ or error\$ or impair\$ or instabilit\$
or malform\$ or problem\$ or syndrome\$)).ti,ab.
- 150 breech presentation/ or exp induced abortion/ or exp instrumental
delivery/ or labor induction/ or premature labor/
- 151 150 use emez
exp abortion, induced/ or breech presentation/ or exp cesarean section/ or
- 152 exp extraction, obstetrical/ or labor, induced/ or exp obstetric labor,
premature/
- 153 152 use mesz
- 154 induced abortion/ or premature birth/
- 155 154 use psych
(ca?sarean or ((breech\$ or forced or forcep\$ or induce\$ or instrumental or
156 mechanical or premature or pre?term) adj2 (abort\$ or birth or delivery or
extraction or labo?r\$ or presentation))).ti,ab.
- 157 *autism/ use emez, psych or *autistic disorder/ use mesz

158 infantile autism.ti,ab.

159 or/61-149,151,153,155-158

160 (ae or it or si or to).fs.

161 exp adverse drug reaction/ or drug contraindication/ or exp "drug toxicity and intoxication"/ or drug interaction/ or drug monitoring/ or drug safety/ or drug surveillance program/ or drug tolerability/ or drug tolerance/ or phase 4 clinical trial/ or postmarketing surveillance/ or exp complication/ or risk/ or risk assessment/ or risk factor/ or exp side effect/ or exp toxicity/

162 or/160-161 use emez

163 (ae or co or ct or de or po or mo or to).fs.

164 abnormalities, drug induced/ or clinical trial, phase iv/ or exp "drug-related side effects and adverse reactions"/ or drug interactions/ or drug hypersensitivity/ or drug interaction/ or drug monitoring/ or drug tolerance/ or intraoperative complications/ or exp poisoning/ or exp postoperative complication/ or exp product surveillance, postmarketing/ or risk/ or risk assessment/ or risk factors/

165 or/163-164 use mesz

166 "complications (disorders)"/ or drug interactions/ or drug tolerance/ or postsurgical complications/ or risk assessment/ or risk factors/ or exp "side effects (treatment)"/ or exp toxic disorders/ or exp toxicity/

167 166 use psych

168 (odds ratio or (risk\$ adj2 (factor\$ or increas\$ or relative)) or predispos\$ or causa\$ or (((adverse or negativ\$ or side or undesir\$ or unwanted) adj2 (effect\$ or event\$ or outcome\$ or reaction\$)) or discontinuation effect\$ or poison\$ or toxic\$) or (caution\$ or complication\$ or contraindicat\$ or contra indicat\$ or death\$ or harm\$ or hazard\$ or interaction\$1 or lethal\$ or safety or safe or tolerab\$ or intolerab\$ or warning\$) or (treatment emergent or adrs)).ti,ab. or (intoxicat\$ or overdos\$).ti,ab,hw.

169 or/162,165,167-168

170 159 or 169

160 (or/11,18,23,29,34,44,49,55,59 or (or/24,30,35 and [8 from APMH root version 1])) and [74 from APMH root version 1] and 170

Search 2 (high specificity)

1. exp *pregnancy/ or exp *prenatal development/ or *child development/
2. 1 use emez
3. exp *pregnancy/ or "exp *"embryonic and fetal development"/
4. 3 use mesz

5. exp *pregnancy/ or exp *infant development/
6. 5 use psych
7. ((ante?natal\$ or ante?part\$ or birth\$ or breastfeed\$ or (breast adj (feed\$ or fed)) or child?birth\$ or ((first or second or third) adj2 trimester\$) or labor or laboring or labour or labouring or lactat\$ or maternal\$ or new?born\$ or peri?natal\$ or obstetric\$ or postbirth\$ or post?partum\$ or post?natal\$ or pregnan\$ or pre?nat\$ or puerperal\$ or puerperium\$ or wean\$1 or weaning) or (baby or babies or congenital\$ or embryo\$ or f?etal or f?etus\$ or gestation or infant\$ or intra?uterin\$ or in\$1 uterus or in\$1 utero or neonat\$ or newborn\$ or un?born child\$)).ti.
8. or/2,4,6-7
9. exp *antidepressant agent/ or exp *neuroleptic agent/ or exp *antihistaminic agent/ or exp *anticonvulsive agent/ or exp *hypnotic agent/ or exp *benzodiazepine derivative/ or exp *anxiolytic agent/ or exp *central stimulant agent/
10. 9 use emez
11. exp *antidepressive agents/ or exp *serotonin uptake inhibitors/ or exp *monoamine oxidase inhibitors/ or exp *antipsychotic agents/ or exp *histamine antagonists/ or exp *anticonvulsants/ or exp *"hypnotics and sedatives"/ or exp *benzodiazepines/ or exp *sedative agent/ or exp *anti-anxiety agents/ or exp *central nervous system stimulants/
12. 11 use mesz
13. exp *antidepressant drugs/ or exp *serotonin reuptake inhibitors/ or exp *monoamine oxidase inhibitors/ or exp *neuroleptic drugs/ or exp *antihistaminic drugs/ or exp *anticonvulsive drugs/ or exp *hypnotic drugs/ or exp *benzodiazepines/ or exp *sedatives/ or exp *tranquilizing drugs/ or exp *cns stimulating drugs/
14. 13 use psych
15. (tricyclic\$ or tca\$1 or (ssri\$ or ((serotonin or 5 ht or 5 hydroxytryptamine) adj (uptake or reuptake or re uptake) adj inhibit\$)) or (antidepress\$ or anti depress\$ or maoi\$1 or ((adrenaline or amine or mao or mono amin\$ or monoamin\$ or tyramin\$) adj2 inhibit\$)) or (snri\$ or ssnri\$ or ((noradrenalin or norepinephrine) adj serotonin adj (uptake or reuptake or re uptake) adj inhibitor\$) or (serotonin adj (noradrenalin or norepi- nephrine) adj (uptake or reuptake or re uptake) adj inhibitor\$)) or (agomelatin\$ or amitriptylin\$ or citalopram or clomipramin\$ or dosulepin or dothiepin or doxepin or duloxetine\$ or escitalopram or fluoxetine\$ or flupentixol or flupenthixol or fluvoxamin\$ or imipramin\$ or isocarboxazid or lofepramin\$ or mianserin or mirtazapin\$ or moclobemid\$ or nortriptylin\$ or paroxetine\$ or phenelzin\$ or phenothiazin\$ or reboxetin\$ or sertraline\$ or tranlycypromin\$ or trazodon\$ or trimipramin\$ or venlafaxin\$) or (antipsychotic\$ or anti psychotic\$ or (major adj2 (butyrophenon\$ or phenoth- iazin\$ or tranquil\$)) or neuroleptic\$) or (benzamide\$ or butrophenone\$ or diphenylbutylpiperidine\$ or

phenothiazine\$) or (amisulprid\$ or aripiprazole or asenapin\$ or benperidol or chlorpromazin\$ or clozapin\$ or flupentixol or fluphenazin\$ or haloperidol or levomepromazin\$ or methotrimeprazin\$ or olanzapin\$ or paliperidon\$ or pericyazin\$ or periciazin\$ or perphenazin\$ or pimozide or pipotiazin\$ or pipothiazin\$ or prochlorperazin\$ or promazin\$ or propericiazin\$ or quetiapin\$ or risperidon\$ or sulpiride or trifluoperazin\$ or trifluoperaz or zuclopentixol or zuclopenthixol) or (antihistamin\$ or anti histamin\$ or (histamin\$ adj2 (antagonist\$ or block\$))) or promethazin\$ or (anticonvuls\$ or anti convuls\$ or antiepilept\$ or anti epilep\$) or (carbamazepin\$ or eslicarbazepin\$ or ethosuximide or lamotrigin\$ or oxcarbazepin\$ or phenytoin or primidon\$ or rufinamid\$ or topiramate or vigabatrin) or hypnotic\$ or (zopiclon\$ or zolpidem or zaleplon) or (benzo\$1 or benzodiazepin\$) or (sedative\$ or tranquili\$) or (alprazolam or buspiron\$ or chlordiazepoxid\$ or diazepam or lorazepam or oxazepam) or (((antianxiety or anti anxiety or ataractic) adj2 (agent\$ or drug\$ or treat\$)) or anxiolytic\$ or ((medium or minor) adj2 tranquil\$) or (serotonergic adj (agent\$ or drug\$ or preparation\$))) or meprobamate or stimulant\$ or (atomoxetine\$ or dexamfetamin\$ or dextroamphetamin\$ or methylphenidate) or (carbamazepin\$ or hypericum or lithium\$ or st john\$ wart or valproate or valproic acid) or (acamprosate or baclofen or buprenorphin\$ or carbamazepin\$ or chlordiazepoxide or chlormethiazole or clomethiazole or clonidin\$ or disulfiram or lofexidin\$ or methadone or naltrexon\$) or psychotropic\$.ti.

16. or/10,12,14-15

17. ae,de,si.fs. use emez, mesz or drug interations/ use psych or exp "side effects (treatment)"/ use psych

18. 8 and 16 and 17

3 Study design filters - all databases

3.1 Quantitative systematic review study design filters

3.11 Quantitative systematic review study design filter, general medical databases

Embase, MEDLINE, MEDLINE In-Process, PsycINFO - OVID SP

1 meta analysis/ or systematic review/

2 1 use emez

3 meta analysis.sh,pt. or "meta-analysis as topic"/ or "review literature as topic"/

4 3 use mesz, prem

- 5 (literature review or meta analysis).sh,id,md. or systematic review.id,md.
6 5 use psych
(exp bibliographic database/ or (((electronic or computer\$ or online) adj
7 database\$) or bids or cochrane or embase or index medicus or isi citation or
medline or psyclit or psychlit or scisearch or science citation or (web adj2
science)).ti,ab.) and (review\$.ti,ab,sh,pt. or systematic\$.ti,ab.)
8 7 use emez
(exp databases, bibliographic/ or (((electronic or computer\$ or online) adj
9 database\$) or bids or cochrane or embase or index medicus or isi citation or
medline or psyclit or psychlit or scisearch or science citation or (web adj2
science)).ti,ab.) and (review\$.ti,ab,sh,pt. or systematic\$.ti,ab.)
10 9 use mesz, prem
(computer searching.sh,id. or (((electronic or computer\$ or online) adj
11 database\$) or bids or cochrane or embase or index medicus or isi citation or
medline or psyclit or psychlit or scisearch or science citation or (web adj2
science)).ti,ab.) and (review\$.ti,ab,pt. or systematic\$.ti,ab.)
12 11 use psych
((analy\$ or assessment\$ or evidence\$ or methodol\$ or quantitativ\$ or
13 systematic\$) adj2 (overview\$ or review\$)).tw. or ((analy\$ or assessment\$ or
evidence\$ or methodol\$ or quantitativ\$ or systematic\$).ti. and review\$.ti,pt.)
or (systematic\$ adj2 search\$).ti,ab.
14 (metaanal\$ or meta anal\$).ti,ab.
15 (research adj (review\$ or integration)).ti,ab.
16 reference list\$.ab.
17 bibliograph\$.ab.
18 published studies.ab.
19 relevant journals.ab.
20 selection criteria.ab.
21 (data adj (extraction or synthesis)).ab.
22 (handsearch\$ or ((hand or manual) adj search\$)).ti,ab.
23 (mantel haenszel or peto or dersimonian or der simonian).ti,ab.
24 (fixed effect\$ or random effect\$).ti,ab.
25 ((pool\$ or combined or combining) adj2 (data or trials or studies or
results)).ti,ab.
26 or/2,4,6,8,10,12-25

3.12 Quantitative systematic review study design filter, topic specific databases

CINAHL – EBSCO HOST

s33	s1 or s2 or s3 or s4 or s5 or s6 or s7 or s8 or s9 or s10 or s11 or s12 or s13 or s14 or s15 or s16 or s22 or s23 or s26 or s27 or s28 or s29 or s30 or s31 or s32
s32	ti (analy* n5 review* or assessment* n5 review* or evidence* n5 review* or methodol* n5 review* or quantativ* n5 review* or systematic* n5 review*) or ab (analy* n5 review* or assessment* n5 review* or evidence* n5 review* or methodol* n5 review* or quantativ* n5 review* or systematic* n5 review*)
s31	ti (analy* n5 overview* or assessment* n5 overview* or evidence* n5 overview* or methodol* n5 overview* or quantativ* n5 overview* or systematic* n5 overview*) or ab (analy* n5 overview* or assessment* n5 overview* or evidence* n5 overview* or methodol* n5 overview* or quantativ* n5 overview* or systematic* n5 overview*)
s30	ti (pool* n2 results or combined n2 results or combining n2 results) or ab (pool* n2 results or combined n2 results or combining n2 results)
s29	ti (pool* n2 studies or combined n2 studies or combining n2 studies) or ab (pool* n2 studies or combined n2 studies or combining n2 studies)
s28	ti (pool* n2 trials or combined n2 trials or combining n2 trials) or ab (pool* n2 trials or combined n2 trials or combining n2 trials)
s27	ti (pool* n2 data or combined n2 data or combining n2 data) or ab (pool* n2 data or combined n2 data or combining n2 data)
s26	s24 and s25
s25	ti review* or pt review*
s24	ti analy* or assessment* or evidence* or methodol* or quantativ* or systematic*
s23	ti "systematic* n5 search*" or ab "systematic* n5 search*"
s22	(s17 or s18 or s19) and (s20 or s21)
s21	ti systematic* or ab systematic*
s20	tx review* or mw review* or pt review*
s19	(mh "cochrane library")
s18	ti (bids or cochrane or index medicus or "isi citation" or psyclit or psychlit or scisearch or "science citation" or web n2 science) or ab (bids or cochrane or index medicus or "isi citation" or psyclit or psychlit or scisearch or "science citation" or web n2 science)

s17	ti ("electronic database*" or "bibliographic database*" or "computeri?ed database*" or "online database*") or ab ("electronic database*" or "bibliographic database*" or "computeri?ed database*" or "online database*")
s16	(mh "literature review")
s15	pt systematic* or pt meta*
s14	ti ("fixed effect*" or "random effect*") or ab ("fixed effect*" or "random effect*")
s13	ti ("mantel haenszel" or peto or dersimonian or "der simonian") or ab ("mantel haenszel" or peto or dersimonian or "der simonian")
s12	ti (handsearch* or "hand search*" or "manual search*") or ab (handsearch* or "hand search*" or "manual search*")
s11	ab "data extraction" or "data synthesis"
s10	ab "selection criteria"
s9	ab "relevant journals"
s8	ab "published studies"
s7	ab bibliograph*
s6	ab "reference list*"
s5	ti ("research review*" or "research integration") or ab ("research review*" or "research integration")
s4	ti (metaanal* or "meta anal*") or ab (metaanal* or "meta anal*")
s3	(mh "meta analysis")
s2	(mh "systematic review")
s1	(mh "literature searching+")

3.2 Qualitative systematic review study design filters

3.21 Qualitative systematic review study design filter, general medical databases Embase, MEDLINE, MEDLINE In-Process, PsycINFO – OVID SP

(cross case analys\$ or eppi approach or metaethno\$ or meta ethno\$ or metanarrative\$ or meta narrative\$ or meta overview or metaoverview or 1 metastud\$ or meta stud\$ or metasummar\$ or meta summar\$ or qualitative overview\$ or ((critical interpretative or evidence or meta or mixed methods or multilevel or multi level or narrative or parallel or realist) adj synthes\$) or

metasynthes\$).mp. or (qualitative\$ and (metaanal\$ or meta anal\$ or synthes\$ or systematic review\$)).ti,ab,hw,pt.

3.22 Qualitative systematic review study design filter, general medical databases CINAHL- EBSCO Host

tx (("cross case analys*" or "eppi approach" or metaethno* or "meta ethno*" or metanarrative* or "meta narrative*" or "meta overview" or metaoverview or metastud* or "meta stud*" or metasummar* or "meta summar*" or "qualitative overview*" or ("critical interpretative" or evidence or meta or "mixed methods" or multilevel or "multi level" or narrative or parallel or realist) n1 synthes*) or metasynthes*) or (qualitative* and (metaanal* or "meta anal*" or synthes* or systematic review*)))

3.3 Randomized controlled trials study design filters

3.31 Randomized controlled trial study design filter, general medical databases Embase, MEDLINE, PreMEDLINE, PsycINFO – OVID SP

- exp "clinical trial (topic)"/ or exp clinical trial/ or crossover procedure/ or
1 double blind procedure/ or placebo/ or randomization/ or random sample/
or single blind procedure/
- 2 1 use emez
- exp clinical trial/ or exp "clinical trials as topic"/ or cross-over studies/ or
3 double-blind method/ or placebos/ or random allocation/ or single-blind
method/
- 4 3 use mesz, prem
- 5 (clinical trials or placebo or random sampling).sh,id.
- 6 5 use psych
- 7 (clinical adj2 trial\$).ti,ab.
- 8 (crossover or cross over).ti,ab.
- 9 (((single\$ or doubl\$ or trebl\$ or tripl\$) adj2 blind\$) or mask\$ or dummy or
doubleblind\$ or singleblind\$ or trebleblind\$ or tripleblind\$).ti,ab.
- 10 (placebo\$ or random\$).ti,ab.
- 11 treatment outcome\$.md. use psych
- 12 animals/ not human\$.mp. use emez
- 13 animal\$/ not human\$/ use mesz, prem
- 14 (animal not human).po. use psych

15 (or/2,4,6-11) not (or/12-14)

3.32 Randomized controlled trial study design filter, topic specific databases CINAHL- EBSCO Host

s10	s9 not s8
s9	s1 or s2 or s3 or s4 or s5 or s6 or s7
s8	(mh "animals") not (mh "human")
s7	(pt "clinical trial") or (pt "randomized controlled trial")
s6	ti (placebo* or random*) or ab (placebo* or random*)
s5	ti ("single blind*" or "double blind*" or "treble blind*" or mask* or dummy* or singleblind* or doubleblind* or trebleblind*) or ab ("single blind*" or "double blind*" or "treble blind*" or mask* or dummy* or singleblind* or doubleblind* or trebleblind*)
s4	ti (crossover or "cross over ") or ab (crossover or "cross over")
s3	ti clinical n2 trial* or ab clinical n2 trial*
s2	(mh "crossover design") or (mh "placebos") or (mh "random assignment") or (mh "random sample")
s1	(mh "clinical trials+")

3.4 Observational study design filters

3.41 Observational studies study design filter, general medical databases Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

- exp case control study/ or cohort analysis/ or cross-sectional study/ or
 1 follow up/ or longitudinal study/ or observational study/ or prospective
 study/ or retrospective study/
 2 1 use emez
 3 exp case control studies/ or exp cohort studies/ or cross-sectional studies/ or
 epidemiologic studies/
 4 [3 use mesz]
 (cohort analysis or followup studies or longitudinal studies or prospective
 5 studies or retrospective studies).sh,id. or (followup study or longitudinal
 study or prospective study or retrospective study).md.

- 6 [5 use psych]
- 7 ((epidemiologic\$ or observational) adj (study or studies)).ti,ab.
- 8 (cohort\$1 or cross section\$ or crosssection\$ or followup\$ or follow up\$ or followed or longitudinal\$ or prospective\$ or retrospective\$).ti,ab.
- 9 (case adj2 (control or series)).ti,ab.
- 10 or/2,4,6-9

3.5 Qualitative studies, health survey study design filters

3.51 Qualitative studies (primary and secondary), health surveys
Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

- 1 cluster analysis/ or constant comparative method/ or content analysis/ or cultural anthropology/ or discourse analysis/ or ethnographic research/ or ethnography/ or ethnology/ or ethnonursing research/ or field study/ or grounded theory/ or information processing/ or nursing methodology research/ or personal experience/ or phenomenology/ or purposive sample/ or qualitative research/ or exp recording/ or semi structured interview/ or storytelling/ or structured interview/ or thematic analysis/ or theoretical sample/
- 2 1 use emez
anthropology, cultural/ or focus groups/ or exp tape recording/ or interview/ or personal narratives/ or exp interviews as topic/ or narration/
- 3 or nursing methodology research/ or observation/ or qualitative research/ or sampling studies/ or cluster analysis/ or videodisc recording/
- 4 3 use mesz
"culture (anthropological)"/ or cluster analysis/ or content analysis/ or discourse analysis/ or ethnography/ or "experiences (events)"/ or grounded theory/ or interviews/ or life experiences/ or narratives/ or observation
- 5 methods/ or phenomenology/ or qualitative research/ or structured clinical interview/ or exp tape recorders/ or storytelling/ or (field study or interview or focus group or qualitative study).md.
- 6 5 use psych
(action research or audiorecord\$ or ((audio or tape or video\$) adj5 record\$) or colaizzi\$ or (constant adj (comparative or comparison)) or content analy\$ or
- 7 critical social\$ or (data adj1 saturat\$) or discourse analys?s or emic or ethical enquiry or ethno\$ or etic or experiences or fieldnote\$ or (field adj (note\$ or record\$ or stud\$ or research)) or (focus adj4 (group\$ or samp1\$)) or ((focus\$

- or structured) adj2 interview\$) or giorgi\$ or glaser or (grounded adj (theor\$ or study or studies or research)) or heidegger\$ or hermeneutic\$ or heuristic or human science or husserl\$ or ((life or lived) adj experience\$) or maximum variation or merleau or narrat\$ or ((participant\$ or nonparticipant\$) adj3 observ\$) or ((philosophical or social) adj research\$) or (pilot testing and survey) or purpos\$ sampl\$ or qualitative\$ or ricoeur or semiotics or shadowing or snowball or spiegelberg\$ or stories or story or storytell\$ or strauss or structured categor\$ or tape record\$ or taperecord\$ or testimon\$ or (thematic\$ adj3 analys\$) or Themes or theoretical sampl\$ or unstructured categor\$ or van kaam\$ or van manen or videorecord\$ or video record\$ or videotap\$ or video tap\$).ti,ab.
- (cross case analys\$ or eppi approach or metaethno\$ or meta ethno\$ or metanarrative\$ or meta narrative\$ or meta overview or metaoverview or metastud\$ or meta stud\$ or metasummar\$ or meta summar\$ or qualitative
8 overview\$ or ((critical interpretative or evidence or meta or mixed methods or multilevel or multi level or narrative or parallel or realist) adj synthes\$) or metasyntes\$).mp. or (qualitative\$ and (metaanal\$ or meta anal\$ or syntes\$ or systematic review\$)).ti,ab,hw,pt.
- 9 or/2,4,6-8
- 10 health care survey/ or exp interview/ or qualitative research/ or exp questionnaire/
- 11 10 use emez
- 12 health care surveys/ or exp interviews as topic/ or qualitative research/ or exp questionnaires/
- 13 12 use mesz
- 14 interviews/ or qualitative research/ or consumer surveys/ or questionnaires/
- 15 14 use psych
- 16 (interview* or questionnaire* or survey*).ti,ab.
- 17 or/11,13,15-16
- 18 exp health care organisation/ use emez or exp health services administration/ use mesz or exp health care administration/ use psych
- 19 or/17-18

3.52 Qualitative studies (primary and secondary), health surveys
CINAHL – Ebsco Host

s27	s19 or s25 or s26
s26	(mh "health services administration+")

s25	s20 or s21 or s22 or s23 or s24
s24	ti ((interview* or questionnaire* or survey*)) or ab ((interview* or questionnaire* or survey*))
s23	(mh "qualitative studies")
s22	(mh "questionnaires+")
s21	(mh "interviews+")
s20	(mh "surveys")
s19	s1 or s2 or s3 or s4 or s5 or s6 or s7 or s8 or s9 or s10 or s11 or s12 or s13 or s14 or s15 or s16 or s17
s18	ti (("action research" or audiorecord* or ((audio or tape or video*) n5 record*) or colaizzi* or (constant n1 (comparative or comparison)) or "content analy?s" or "critical social*" or (data n1 saturat*) or "discourse analys?s" or emic or "ethical enquiry" or ethno* or etic or experiences or fieldnote* or (field n1 (note* or record* or stud* or research)) or (focus n4 (group* or sampl*)) or ((focus* or structured) n2 interview*) or giorgi* or glaser or (grounded n1 (theor* or study or studies or research)) or heidegger* or hermeneutic* or heuristic or "human science" or husserl* or ((life or lived) n1 experience*) or "maximum variation" or merleau or narrat* or ((participant* or nonparticipant*) n3 observ*) or ((philosophical or social) n1 research*) or ("pilot testing" and survey) or "purpos* sampl*" or qualitative* or ricoeur or semiotics or shadowing or snowball or spiegelberg* or stories or story or storytell* or strauss or "structured categor*" or tape record* or taperecord* or testimon* or (thematic* n3 analys*) or themes or "theoretical sampl*" or "unstructured categor*" or van kaam* or van manen or videorecord* or video record* or videotap* or video tap*)) or ab (("action research" or audiorecord* or ((audio or tape or video*) n5 record*) or colaizzi* or (constant n1 (comparative or comparison)) or "content analy?s" or "critical social*" or (data n1 saturat*) or "discourse analys?s" or emic or "ethical enquiry" or ethno* or etic or experiences or fieldnote* or (field n1 (note* or record* or stud* or research)) or (focus n4 (group* or sampl*)) or ((focus* or structured) n2 interview*) or giorgi* or glaser or (grounded n1 (theor* or study or studies or research)) or heidegger* or hermeneutic* or heuristic or "human science" or husserl* or ((life or lived) n1 experience*) or "maximum variation" or merleau or narrat* or ((participant* or nonparticipant*) n3 observ*) or ((philosophical or social) n1 research*) or ("pilot testing" and survey) or "purpos* sampl*" or qualitative* or ricoeur or semiotics or shadowing or snowball or spiegelberg* or stories or story or storytell* or strauss or "structured categor*" or tape record* or taperecord* or testimon* or (thematic* n3 analys*) or themes or "theoretical sampl*" or "unstructured categor*" or

	van kaam* or van manen or videorecord* or video record* or videotap* or video tap*)
s17	(mh "videorecording")
s16	(mh "theoretical sample")
s15	(mh "thematic analysis")
s14	(mh "qualitative validity")
s13	(mh "qualitative studies+")
s12	(mh "purposive sample")
s11	(mh "phenomenology")
s10	(mh "observational methods+")
s9	(mh "narratives")
s8	(mh "information processing (iowa noc)")
s7	(mh "focus groups")
s6	(mh "field studies")
s5	(mh "discourse analysis")
s4	(mh "content analysis")
s3	(mh "constant comparative method")
s2	(mh "cluster analysis")
s1	(mh "audiorecording")

APPENDIX 11: SEARCH STRATEGIES FOR THE IDENTIFICATION OF HEALTH ECONOMICS EVIDENCE

Scoping searches

A broad preliminary search of the literature was undertaken in March 2013 to obtain an overview of the issues likely to be covered by the scope, and to help define key areas. Searches were limited to full and partial economic evaluations, and quality of life studies.

- NHS Economic Evaluation Database (NHS EED) [Cochrane Library]
- Excerpta Medica Database (Embase)
- HTA database (technology assessments)
- Medical Literature Analysis and Retrieval System Online (MEDLINE/MEDLINE In-Process)

Further information about this process can be found in The Guidelines Manual (NICE, 2012).

Systematic search

Each search was constructed using the groups of terms set out in Text Box 1. The full set of search terms is documented in sections 1 to 3.1. The selection of search terms was kept broad to maximise retrieval of evidence in a wide range of areas of interest to the GDG.

Text Box 1: Summary of systematic search strategies: Search strategy construction

Summary of systematic search strategies for economic evidence					
Section 2: prevention					
Review question(s)	Search type	Search construction	Study design searched	Databases searched	Date range searched
2.1, 2.2, 2.3	Generic search	General medical databases: [(population terms version 1) AND (HE/QoL study design filter terms)] Topic specific databases: [(population terms version 1)]	Full and partial economic evaluations, quality of life studies	General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: NHS EED, HTA	2006 to 07 April 2014

Section 3: case identification and assessment					
Review question(s)	Search type	Search construction	Study design searched	Databases searched	Date range searched
3.1, 3.2, 3.3	Focused search	<p>General medical databases: [(Population terms version 1) AND (((general identification instrument/ diagnostic assessment terms) AND (sensitivity/specificity terms)) OR (named instruments)) AND (HE/QoL study design filter terms)]</p> <p>Topic specific databases: [(population terms version 1)]</p>	Full and partial economic evaluations, quality of life studies	<p>General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO</p> <p>Topic specific databases: NHS EED, HTA</p>	1998 to 07 April 2014

3.1, 3.2, 3.3	Generic search	General medical databases: [(population terms version 1) AND (HE/QoL study design filter terms)] Topic specific databases: [(population terms version 1)]	Full and partial economic evaluations, quality of life studies	General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: NHS EED, HTA	2006 to 07 April 2014
Section 4: interventions for the treatment of mental health problems					
Review question(s)	Search type	Search construction	Study design searched	Databases searched	Date range searched
4.1, 4.2, 4.3, 4.4, 4.5, 4.6	Generic search	General medical databases: [(population terms version 1) AND (HE/QoL study design filter terms)] Topic specific databases: [(population terms version 1)]	Full and partial economic evaluations, quality of life studies	General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: NHS EED, HTA	2006 to 07 April 2014

4.1	Focused search	[(still birth terms) AND (holding terms) AND (HE/QoL study design filter terms)]	Full and partial economic evaluations, quality of life studies	General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: NHS EED, HTA	1998 to April 2014
4.2	Focused search	Search 1 [(population terms version 1 OR population terms version 2) AND (pharmacological terms) AND (harm terms) AND (HE/QoL study design filter terms)] Topic specific databases: [(population terms version 1)]	Full and partial economic evaluations, quality of life studies	General medical databases: Embase, MEDLINE, PreMEDLINE, PsycINFO Topic specific databases: NHS EED, HTA	1998 to April 2014

1 APMH STEM

1.1 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

Version 1

- 1 birth/ or exp breastfeeding/ or breastmilk/ or exp childbirth/ or lactation/
or newborn/ or obstetric\$.hw. or pelvimetry/ or perinatal period/ or exp
pregnancy/ or exp pregnancy disorder/
- 2 1 use emez
exp breastfeeding/ or exp delivery, obstetric/ or exp infant, newborn/ or exp
lactation/ or exp maternal health services/ or exp maternal child nursing/ or
milk, human/ or obstetric\$.hw. or parturition/ or pelvimetry/ or exp
- 3 perinatal care/ or peripartum period/ or exp postpartum period/ or exp
pregnancy/ or exp pregnancy complications/ or exp pregnancy, multiple/ or
prenatal care/ or prenatal diagnosis/ or exp pregnancy trimesters/ or
uterine monitoring/ or weaning/
- 4 3 use mesz
breastfeeding/ or "labour (childbirth)"/ or lactation/ or obstetrical
- 5 complications/ or obstetric\$.hw,id. or perinatal period/ or postnatal care/ or
postnatal period/ or exp pregnancy/ or exp prenatal care/ or exp pregnancy
outcomes/ or prenatal diagnosis/ or weaning/
- 6 5 use psych
(ante?natal\$ or ante?part\$ or birth\$ or breastfeed\$ or (breast adj (feed\$ or
fed)) or child?birth\$ or ((first or second or third) adj2 trimester\$) or labor or
- 7 laboring or labour or labouring or lactat\$ or maternal\$ or new?born\$ or
peri?natal\$ or obstetric\$ or postbirth\$ or post?partum\$ or post?natal\$ or
pregnan\$ or pre?nat\$ or puerperal\$ or puerperium\$ or wean\$1 or
weaning).ti,ab.
- 8 or/2,4,6-7
- 9 exp mental disease/ or mental patient/
- 10 9 use emez
- 11 exp mental disorders/ or mentally ill persons/
- 12 11 use mesz
- 13 exp chronic mental illness/ or exp mental disorders/
- 14 13 use psych
((mental\$ or psychologic\$) adj2 (deficien\$ or disease\$ or disorder\$ or
disturbance\$ or dysfunction\$ or health or illness\$ or problem\$)).ti,ab,id.
- 15
- 16 or/10,12,14-15
- 17 anxiety/ or exp anxiety disorder/ or hyperhidrosis/ or exp mutism/

18 17 use emez

19 anxiety/ or exp anxiety disorders/ or blushing/ or exp hyperhidrosis/ or mutism/ or or shyness/

20 19 use mesz

21 anxiety/ or anxiety management/ or exp anxiety disorders/ or exp mutism/ or social anxiety/ or sweating/ or timidity/

22 21 use psyh

(anxiety\$ or anxious\$ or ((chronic\$ or excessiv\$ or intens\$ or (long\$ adj2 last\$)

23 or neuros\$ or neurotic\$ or ongoing or persist\$ or serious\$ or sever\$ or uncontrol\$ or un control\$ or unrelent\$ or un relent\$) adj2 worry)).ti,ab,id.

(body dysmorphic disorder or compulsions or compulsive behavior or obsessive behavior).sh. or (body dysmorphi\$ or clean\$ response\$ or compulsion\$ or dysmorphophobi\$ or imagine\$ ugl\$ or obsession or

24 obsessional or obsessions or obsessive compulsive or obsess\$ ruminat\$ or ocd or osteochondr\$ or recurr\$ thought\$ or scrupulosity or ((arrang\$ or check\$ or clean\$ or count\$ or hoard\$ or order\$ or repeat\$ or symmetr\$ or wash\$) adj compulsi\$)).ti,ab,id,hw.

25 panic.sh. or panic\$.ti,ab.

(acrophob\$ or agoraphob\$ or claustrophob\$ or emetophob\$ or enfantaphob\$ or homophob\$ or infantaphob\$ or kinesiphob\$ or lesbophob\$ or neophob\$ or neurophob\$ or phobi\$ or transphob\$ or to?ophobi\$ or trypanophob\$ or xenophob\$ or ((acute\$ or chronic\$ or extreme\$ or intens\$ or irrational\$ or persistent\$ or serious\$) adj2 fear\$) or (fear\$ adj4 (air travel or animal\$ or

26 birth\$ or blood\$ or buses or ((closed or public) adj2 space\$) or childbirth\$ or crowd\$ or dark\$ or dental\$ or dentist\$ or dog\$1 or dying or falls or falling or fly or flying or height\$ or hypochondriacal or injection\$ or injur\$ or laughed or leaving home or lightening or movement\$ or needle\$ or night\$ or panic\$ or plane\$ or pregnan\$ or reinjure\$ or school\$ or snake\$ or space\$ or spider\$ or test\$ or thunder\$ or tokophob\$ or tocophob\$ or train\$ or travel\$ or water)) or specific fear\$).ti,ab,id.

((anxiety\$ or anxious\$ or phobia\$ or phobic\$) adj2 (performance or social\$)) or anthropophobi\$ or socioanxi\$ or sociophobi\$ or ((blush\$ or sweat\$ or trembl\$) adj3 (anxiety\$ or anxious\$ or chronic\$ or excessiv\$ or fear\$ or severe)) or ((interpersonal or inter personal or social\$ or socio\$) adj2 (aversion\$ or aversiv\$ or confiden\$ or difficult\$ or disorder\$ or distress\$ or fear\$)) or

27 hyperhydrosis or hyperperspirat\$ or (hyper adj (hydrosis or perspirat\$)) or ((mute\$ or mutism) adj2 (elective\$ or selective\$)) or ((negative evaluation or speak\$) adj3 (anxiety\$ or anxious\$ or distress\$ or fear\$)) or paruresis or (((personalit\$ or phobi\$ or social\$ or socio\$) adj2 avoid\$) or avoidant disorder) or ((phobi\$ or social) adj2 neuros\$) or phobic disorder\$ or (shy or shyness) or specific phobia\$).ti,ab,id.

- (critical incident stress or emotional trauma or psychological stress or stress, psychological or traumatic neurosis).sh. or (acute stress or asd or combat neuros\$ or combat syndrome or desnos or ((extreme or psycho\$) adj (stress\$ or trauma\$)) or flash back\$ or flashback\$ or hypervigilan\$ or hypervigilen\$ 28 or posttrauma\$ or post trauma\$ or ptsd or railway spine or (rape adj2 trauma\$) or re experienc\$ or reexperienc\$ or stress disorder\$ or torture syndrome or (traumatic adj (neuros\$ or stress)) or (trauma\$ and (avoidance or birth\$ or death\$ or emotion\$ or grief or horror or nightmare\$ or night mare\$))).ti,ab,id.
- 29 or/18,20,22-28
- 30 exp eating disorder/ use emez or exp eating disorders/ use mesz,psych or binge eating/ use psych
- (anorexi\$ or bing\$ or bulimi\$ or (compulsive adj2 (eat\$ or vomit\$)) or (eating adj2 disorder\$) or ednos or ((forced or self induc\$ or selfinduc\$) adj2 (purg\$ or vomit\$)) or hyperorexia or over eat\$ or overeate\$ or (restrict\$ adj2 eat\$)).ti,ab,id.
- 31
- 32 or/30-31
- 33 exp mood disorder/ use emez
- 34 depression/ or exp mood disorders/ use mesz
- 35 exp affective disorders/ use psych
- 36 ((affective or mood) adj (disorder\$ or disturbance\$ or dysfunction\$)).ti,ab,id.
- 37 (cyclothym\$ or depress\$ or dysthym\$ or (low adj2 mood) or melanchol\$ or seasonal affective disorder\$).ti,ab,id.
- ((bipolar or bi polar) adj5 (disorder\$ or depress\$)) or ((cyclothymi\$ or rapid 38 or ultradian) adj5 cycl\$) or hypomani\$ or mania\$ or manic\$ or mixed episode\$ or rcbd).ti,ab,id.
- 39 or/33-38
- 40 "explode schizophrenia"/ or (psychosis\$ or psychotic\$).hw.
- 41 40 use emez
- 42 exp psychotic disorders/ or exp schizophrenia/ or "schizophrenia and disorders with psychotic features"/
- 43 42 use mesz
- 44 exp psychosis/ or exp schizophrenia/
- 45 44 use psych
- (a?athisi\$ or hebephreni\$ or (neuroleptic\$ and ((malignant and syndrome) or (movement adj2 disorder))) or oligophreni\$ or psychotic\$ or psychos?s or 46 schizo\$ or (tardiv\$ and dyskine\$)).ti,ab,id. or ((parkinsoni\$ or neuroleptic induc\$).ti,ab,id. not (parkinson\$ and disease).ti.) or (delusion\$ or hallucinat\$ or paranoi\$ or psychiatric\$ or thought disorder\$).ti,ab,id,hw.

47 or/41,43,45-46

48 exp personality disorder/ use emez

49 exp personality disorders/ use mesz

50 exp personality disorders/

51 50 use psych

((aggressiv\$ or anxious\$ or borderline\$ or dependent\$ or eccentric\$ or emotional\$ or immature or passiv\$ or psychoneurotic or psycho neurotic or

52 unstable) adj5 personalit\$) or (anal\$ adj (personalit\$ or character\$ or retentiv\$)) or aspd or character disorder\$ or (personalit\$ adj5 disorder\$).ti,ab,id.

(anankastic\$ or asocial\$ or avoidant\$ or antisocial\$ or anti social\$ or 53 compulsiv\$ or dissocial\$ or histrionic\$ or narciss\$ or neuropsychopath\$ or obsessiv\$ or paranoi\$ or psychopath\$ or sadist\$ or schizoid\$ or schizotyp\$ or sociopath\$ or (moral adj2 insanity)).ti,ab,id.

(cluster a or cluster b or cluster c or (dsm and (axis and ii)) or (icd and (f60 or 54 f61 or f62)) or ((anxious\$ or dramatic\$ or eccentric\$ or emotional\$ or fearful\$ or odd\$) adj5 cluster\$)).ti,ab.

55 or/48-49,51-54

56 automutilation/ or exp suicidal behavior/

57 56 use emez

58 self-injurious behavior/ or self mutilation/ or suicide/ or suicidal ideation/ or suicide, attempted/

59 58 use mesz

60 suicide/ or attempted suicide/ or exp self injurious behavior/ or suicidal ideation/ or suicide prevention/ or suicidology/

61 60 use psych

(autoaggress\$ or automutilat\$ or (auto adj (aggress\$ or mutilat\$)) or cutt\$ or overdose\$ or (self adj2 cut\$) or selfdestruct\$ or selfharm\$ or selfimmolat\$ or 62 selfinflict\$ or selfinjur\$ or selfmutilat\$ or selfpoison\$ or (self adj (destructbor\$ or harm\$ or immolat\$ or inflict\$ or injur\$ or mutilat\$ or poison\$)) or suicid\$).ti,ab,id.

63 or/57,59,61-62

64 addiction/ or alcoholism/ or exp alcohol abuse/ or exp drug dependence/ or exp drug abuse/ or substance abuse/ or withdrawal syndrome/

65 64 use emez

66 drug seeking behavior/ or exp substance-related disorders/

67 66 use mesz

- addiction/ or exp drug abstinence/ or drug abuse prevention/ or exp drug
68 abuse/ or drug overdoses/ or exp drug withdrawal/ or needle exchange
programs/ or sobriety/
69 68 use psych
70 (alcoholi\$ or (alcohol\$ and (abstinence or detoxification or intoxicat\$ or
rehabilit\$ or withdraw\$))).id,hw.
(alcoholi\$ or drinker\$1 or (drink\$ adj2 use\$1) or ((alcohol\$ or drink\$) adj5
(abstinen\$ or abstain\$ or abus\$ or addict\$ or attenuat\$ or binge\$ or crav\$ or
71 dependen\$ or detox\$ or disease\$ or disorder\$ or excessiv\$ or harm\$ or
hazard\$ or heavy or high risk or intoxicat\$ or misus\$ or overdos\$ or over
dos\$ or problem\$ or rehab\$ or reliance or reliant or relaps\$ or withdraw\$)) or
(control\$ adj2 drink\$) or sobriet\$).ti,ab,id.
(cannabis or cocaine or hashish or heroin or marihuana or marijua\$ or
((acetomorphine or amphetamine\$ or amphetamine\$ or analeptic\$ or crack or
crank or dextroamphetamine\$ or diacephine or diacetylmorphine or
diacetylmorphine or diamorphin\$ or diamorphine or diaphorin or drug or
methadone\$ or methamphetamine\$ or morfin\$ or morphacetin or morphin\$
72 or naltrexone or narcotic\$ or opioid\$ or opium or polydrug\$ or
psychostimulant\$ or speed or stimulant\$ or stimulant\$ or substance or
uppers) adj3 (abstain\$ or abstinen\$ or abus\$ or addict\$ or (excessive adj use\$)
or dependen\$ or (inject\$ adj2 drug\$) or intoxicat\$ or misus\$ or over dos\$ or
overdos\$ or (use\$ adj (disorder\$ or illicit)) or withdraw\$)) or ((drug or
substance) adj use\$)).ti,ab,hw,id.
73 or/65,67,69-72
74 or/16,29,32,39,47,55,63,73
75 8 and 74

1.2 Cochrane Library - Wiley Version 1

- #1 mesh descriptor: [breastfeeding] explode all trees
- #2 mesh descriptor: [infant, newborn] explode all trees
- #3 mesh descriptor: [maternal health services] explode all trees
- #4 mesh descriptor: [maternal-child nursing] explode all trees
- #5 mesh descriptor: [milk, human] this term only
- #6 mesh descriptor: [pelvimetry] this term only
- #7 mesh descriptor: [perinatal care] explode all trees
- #8 mesh descriptor: [peripartum period] this term only
- #9 mesh descriptor: [postpartum period] explode all trees
- #10 mesh descriptor: [parturition] this term only

- #11 mesh descriptor: [pregnancy] explode all trees
- #12 mesh descriptor: [pregnancy complications] explode all trees
- #13 mesh descriptor: [pregnancy, multiple] explode all trees
- #14 mesh descriptor: [prenatal care] this term only
- #15 mesh descriptor: [prenatal diagnosis] this term only
- #16 mesh descriptor: [pregnancy trimesters] explode all trees
- #17 mesh descriptor: [uterine monitoring] this term only
- #18 mesh descriptor: [weaning] this term only
- #19 obstetric*:kw
- #20 (antenatal* or "ante natal*" or antepart* or "ante part*" or birth* or breastfeed* or (breast near/1 (feed* or fed)) or childbirth* or ((first or second or third) near/2 trimester*) or labor or laboring or labour or labouring or lactat* or maternal* or newborn* or "new born*" or obstetric* or perinatal* or "peri natal*" or postbirth* or postpartum* or "post partum*" or postnatal* or "post natal*" or pregnan* or prenat* or "pre nat*" or puerperal* or puerperium* or wean* or weaning):ti
- #21 (antenatal* or "ante natal*" or antepart* or "ante part*" or birth* or breastfeed* or (breast near/1 (feed* or fed)) or childbirth* or ((first or second or third) near/2 trimester*) or labor or laboring or labour or labouring or lactat* or maternal* or newborn* or "new born*" or obstetric* or perinatal* or "peri natal*" or postbirth* or postpartum* or "post partum*" or postnatal* or "post natal*" or pregnan* or prenat* or "pre nat*" or puerperal* or puerperium* or wean* or weaning):ab
- #22 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21
- #23 mesh descriptor: [mental disorders] explode all trees
- #24 mesh descriptor: [mentally ill persons] this term only
- #25 ((mental* or psychologic*) near/2 (deficien* or disease* or disorder* or disturbance* or dysfunction* or health or illness* or problem*)):ti
- #26 ((mental* or psychologic*) near/2 (deficien* or disease* or disorder* or disturbance* or dysfunction* or health or illness* or problem*)):ab
- #27 mesh descriptor: [anxiety] this term only
- #28 mesh descriptor: [anxiety disorders] explode all trees
- #29 mesh descriptor: [blushing] this term only
- #30 mesh descriptor: [hyperhidrosis] explode all trees
- #31 mesh descriptor: [mutism] this term only
- #32 mesh descriptor: [shyness] this term only
- #33 (anxiet* or anxious* or ((chronic* or excessiv* or intens* or (long* near/2 last*) or neuros* or neurotic* or ongoing or persist* or serious* or sever* or uncontrol* or "un control*" or unrelent* or "un relent*") near/2 worry)):ti
- #34 (anxiet* or anxious* or ((chronic* or excessiv* or intens* or (long* near/2 last*) or neuros* or neurotic* or ongoing or persist* or serious* or sever* or uncontrol* or "un control*" or unrelent* or "un relent*") near/2 worry)):ab

- #35 mesh descriptor: [body dysmorphic disorders] this term only
- #36 mesh descriptor: [compulsive behavior] explode all trees
- #37 mesh descriptor: [obsessive behavior] this term only
- #38 ("clean* response*" or compulsion* or obsession* or ("obsessive compulsive" near/1 (disorder* or neuros*)) or ocd or osteochondr* or compulsion or (recurr* near/1 (obsession* or thought)) or "body dysmorphi*" or dysmorphophobi* or "imagine* ugl*" or "obsess* ruminat*" or scrupulosity or ((arrang* or check* or clean* or count* or hoard* or order* or repeat* or symmetr* or wash*) near/1 compulsi*)):ab
- #39 ("clean* response*" or compulsion* or obsession* or ("obsessive compulsive" near/1 (disorder* or neuros*)) or ocd or osteochondr* or compulsion or (recurr* near/1 (obsession* or thought)) or "body dysmorphi*" or dysmorphophobi* or "imagine* ugl*" or "obsess* ruminat*" or scrupulosity or ((arrang* or check* or clean* or count* or hoard* or order* or repeat* or symmetr* or wash*) near/1 compulsi*)):ti
- #40 mesh descriptor: [panic] this term only
- #41 panic*:ti
- #42 panic*:ab
- #43 (acrophob* or agoraphob* or claustrophob* or emetophob* or enfantaphob* or homophob* or infantaphob* or kinesiophob* or lesbophob* or neophob* or neurophob* or phobi* or transphob* or to?ophobi* or trypanophob* or xenophob* or ((acute* or chronic* or extreme* or intens* or irrational* or persistent* or serious*) near/2 fear*) or (fear* near/4 ("air travel" or animal* or birth* or blood* or buses or ((closed or public) near/2 space*) or childbirth* or crowd* or dark* or dental* or dentist* or dog* or dying or falls or falling or fly or flying or height* or hypochondriacal or injection* or injur* or laughed or "leaving home" or lightening or movement* or needle* or night* or panic* or plane* or pregnan* or reinjure* or school* or snake* or space* or spider* or test* or thunder* or tokophob* or tocophob* or train* or travel* or water)) or "specific fear*"):ti
- #44 (acrophob* or agoraphob* or claustrophob* or emetophob* or enfantaphob* or homophob* or infantaphob* or kinesiophob* or lesbophob* or neophob* or neurophob* or phobi* or transphob* or to?ophobi* or trypanophob* or xenophob* or ((acute* or chronic* or extreme* or intens* or irrational* or persistent* or serious*) near/2 fear*) or (fear* near/4 ("air travel" or animal* or birth* or blood* or buses or ((closed or public) near/2 space*) or childbirth* or crowd* or dark* or dental* or dentist* or dog* or dying or falls or falling or fly or flying or height* or hypochondriacal or injection* or injur* or laughed or "leaving home" or lightening or movement* or needle* or night* or panic* or plane* or pregnan* or reinjure* or school* or snake* or space* or spider* or test*

- or thunder* or tokophob* or tocophob* or train* or travel* or water)) or "specific fear*"):ab
- #45 (((anxiet* or anxious* or phobia* or phobic*) near/2 (performance or social*)) or anthropophobi* socioanxi* or sociophobi* or ((blush* or sweat* or trembl*) near/3 (anxiet* or anxious* or chronic* or excessiv* or fear* or severe)) or ((interpersonal or "inter personal" or social* or socio*) near/2 (aversion* or aversiv* or confiden* or difficult* or disorder* or distress* or fear*)) or hyperhydrosis or hyperperspirat* or (hyper near/1 (hydrosis or perspirat*)) or ((mute* or mutism) near/2 (elective* or selective*)) or ((negative evaluation or speak*) near/3 (anxiet* or anxious* or distress* or fear*)) or paruresis or (((personalit* or phobi* or social* or socio*) near/2 avoid*) or "avoidant disorder") or ((phobi* or social) near/2 neuros*) or "phobic disorder*" or (shy or shyness) or "specific phobia*"):ti
- #46 (((anxiet* or anxious* or phobia* or phobic*) near/2 (performance or social*)) or anthropophobi* socioanxi* or sociophobi* or ((blush* or sweat* or trembl*) near/3 (anxiet* or anxious* or chronic* or excessiv* or fear* or severe)) or ((interpersonal or "inter personal" or social* or socio*) near/2 (aversion* or aversiv* or confiden* or difficult* or disorder* or distress* or fear*)) or hyperhydrosis or hyperperspirat* or (hyper near/1 (hydrosis or perspirat*)) or ((mute* or mutism) near/2 (elective* or selective*)) or ((negative evaluation or speak*) near/3 (anxiet* or anxious* or distress* or fear*)) or paruresis or (((personalit* or phobi* or social* or socio*) near/2 avoid*) or "avoidant disorder") or ((phobi* or social) near/2 neuros*) or "phobic disorder*" or (shy or shyness) or "specific phobia*"):ab
- #47 mesh descriptor: [stress, psychological] this term only
- #48 ("acute stress" or asd or "combat neuros*" or "combat syndrome" or desnos or "extreme stress" or "flash back*" or flashback* or hypervigilan* or hypervigilen* or posttrauma* or "post trauma*" or (psycho* near/1 (stress* or trauma*)) or ptsd or "railway spine" or (rape near/2 trauma*) or "re experienc*" or reexperienc* or "stress disorder*" or "torture syndrome" or (traumatic near/1 (neuros* or stress)) or (trauma* and (avoidance or death* or emotion* or grief or horror or nightmare* or "night mare*"))):ti
- #49 ("acute stress" or asd or "combat neuros*" or "combat syndrome" or desnos or "extreme stress" or "flash back*" or flashback* or hypervigilan* or hypervigilen* or posttrauma* or "post trauma*" or (psycho* near/1 (stress* or trauma*)) or ptsd or "railway spine" or (rape near/2 trauma*) or "re experienc*" or reexperienc* or "stress disorder*" or "torture syndrome" or (traumatic near/1 (neuros* or stress)) or (trauma* and (avoidance or death* or emotion* or grief or horror or nightmare* or "night mare*"))):ab
- #50 mesh descriptor: [eating disorders] explode all trees
- #51 (anorexi* or bing* or bulimi* or (compulsive* near/2 (eat* or vomit*)) or (eating near/2 disorder*) or hyperorexia or "over eat*" or overeate* or

- ((forced or "self induc*" or selfinduc*) near/2 (purg* or vomit*)) or (restrict* near/2 eat*):ti
- #52 (anorexi* or bing* or bulimi* or (compulsive* near/2 (eat* or vomit*)) or (eating near/2 disorder*) or hyperorexia or "over eat*" or overeat* or ((forced or "self induc*" or selfinduc*) near/2 (purg* or vomit*)) or (restrict* near/2 eat*):ab
- #53 mesh descriptor: [depression] this term only
- #54 mesh descriptor: [mood disorders] explode all trees
- #55 ((affective or mood) near/1 (disorder* or disturbance* or dysfunction*)):ti
- #56 ((affective or mood) near/1 (disorder* or disturbance* or dysfunction*)):ab
- #57 (cyclothym* or depres* or dysthym* or (low near/2 mood) or melanchol* or "seasonal affective disorder*"):ti
- #58 (cyclothym* or depres* or dysthym* or (low near/2 mood) or melanchol* or "seasonal affective disorder*"):ab
- #59 (((bipolar or "bi polar") near/5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) near/5 cycl*) or hypomani* or mania* or manic* or "mixed episode*" or rcbd):ti
- #60 (((bipolar or "bi polar") near/5 (disorder* or depress*)) or ((cyclothymi* or rapid or ultradian) near/5 cycl*) or hypomani* or mania* or manic* or "mixed episode*" or rcbd):ab
- #61 mesh descriptor: [schizophrenia and disorders with psychotic features] this term only
- #62 mesh descriptor: [psychotic disorders] explode all trees
- #63 mesh descriptor: [schizophrenia] explode all trees
- #64 ((acathisi* or akathisi* or hebephrenic* or (neuroleptic* and ((malignant and syndrome) or (movement near/2 disorder))) or oligophreni* or psychotic* or psychosis or psychoses or schizo* or (tardive* and dyskine*)) or (delusion* or hallucinat* or paranoi* or "thought disorder*"):ti,ab,kw
- #65 (parkinsoni* or "neuroleptic induc"):ti,ab,kw
- #66 mesh descriptor: [personality disorders] explode all trees
- #67 (((aggressiv* or anxious* or borderline* or dependent* or eccentric* or emotional* or immature or passiv* or psychoneurotic or "psycho neurotic" or unstable) near/5 personalit*) or (anal* near/1 (personalit* or character* or retentiv*)) or aspd or "character disorder*" or (personalit* near/5 disorder*)):ti
- #68 (((aggressiv* or anxious* or borderline* or dependent* or eccentric* or emotional* or immature or passiv* or psychoneurotic or "psycho neurotic" or unstable) near/5 personalit*) or (anal* near/1 (personalit* or character* or retentiv*)) or aspd or "character disorder*" or (personalit* near/5 disorder*)):ab
- #69 (anankastic* or asocial* or avoidant* or antisocial* or "anti social*" or compulsiv* or dissocial* or histrionic* or narciss* or neuropsychopath* or

- obsessiv* or paranoi* or psychopath* or sadist* or schizoid* or schizotyp* or sociopath* or (moral near/2 insanity)):ti
- #70 (anankastic* or asocial* or avoidant* or antisocial* or "anti social*" or compulsiv* or dissocial* or histrionic* or narciss* or neuropsychopath* or obsessiv* or paranoi* or psychopath* or sadist* or schizoid* or schizotyp* or sociopath* or (moral near/2 insanity)):ab
- #71 ("cluster a" or "cluster b" or "cluster c" or (dsm and (axis and ii)) or (icd and (f60 or f61 or f62)) or ((anxious* or dramatic* or eccentric* or emotional* or fearful* or odd*) near/5 cluster*)):ti
- #72 ("cluster a" or "cluster b" or "cluster c" or (dsm and (axis and ii)) or (icd and (f60 or f61 or f62)) or ((anxious* or dramatic* or eccentric* or emotional* or fearful* or odd*) near/5 cluster*)):ab
- #73 mesh descriptor: [self-injurious behavior] this term only
- #74 mesh descriptor: [self mutilation] this term only
- #75 mesh descriptor: [suicide] this term only
- #76 mesh descriptor: [suicidal ideation] this term only
- #77 mesh descriptor: [suicide, attempted] this term only
- #78 (autoaggress* or "auto aggress*" or automutilat* or "auto mutilat*" or cutt* or overdose* or (self near/2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinflict* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or suicid*)):ti
- #79 (autoaggress* or "auto aggress*" or automutilat* or "auto mutilat*" or cutt* or overdose* or (self near/2 cut*) or selfdestruct* or "self destruct*" or selfharm* or "self harm*" or selfimmolat* or "self immolat*" or selfinflict* or "self inflict*" or selfinjur* or "self injur*" or selfmutilat* or "self mutilat*" or selfpoison* or "self poison*" or suicid*)):ab
- #80 mesh descriptor: [drug-seeking behavior] this term only
- #81 mesh descriptor: [substance-related disorders] explode all trees
- #82 alcohol* and (abstinence or detoxification or intoxicat* or rehabilit* or withdraw*):kw
- #83 alcoholi*:kw
- #84 (alcoholi* or drinker* or (drink* near/2 use*) or ((alcohol* or drink*) near/5 (abstinen* or abstain* or abus* or addict* or attenuat* or binge* or crav* or dependen* or detox* or disease* or disorder* or excessiv* or harm* or hazard* or heavy or "high risk" or intoxicat* or misus* or overdos* or "over dos*" or problem* or rehab* or reliance or reliant or relaps* or withdraw*)) or (control* near/2 drink*) or sobriet*)):ti
- #85 (alcoholi* or drinker* or (drink* near/2 use*) or ((alcohol* or drink*) near/5 (abstinen* or abstain* or abus* or addict* or attenuat* or binge* or crav* or dependen* or detox* or disease* or disorder* or excessiv* or harm* or hazard* or heavy or "high risk" or intoxicat* or misus* or

- overdos* or "over dos*" or problem* or rehab* or reliance or reliant or relaps* or withdraw*) or (control* near/2 drink*) or sobriet*):ab
- #86 cannabis or cocaine or hashish or heroin or marihuana or marijuana*:kw
- #87 ((acetomorphine or amphetamine* or amphetamine* or analeptic* or cannabis or cocaine or crack or crank or dextroamphetamine* or diacephine or diacetylmorphine or diacetylmorphine or diamorphin* or diamorphine or diaphorin or drug or methadone* or methamphetamine* or morfin* or morphacetin or morphin* or naltrexone or narcotic* or opioid* or opium or polydrug* or psychostimulant* or speed or stimulant* or stimulant* or substance or uppers) near/3 (abstain* or abstinem* or abus* or addict* or (excessive near/1 use*) or dependen* or (inject* near/2 drug*) or intoxicat* or misus* or "over dos*" or overdos* or (use* near/1 (disorder* or illicit)) or withdraw*)) or ((drug or substance) near/1 use*):ti
- #88 ((acetomorphine or amphetamine* or amphetamine* or analeptic* or cannabis or cocaine or crack or crank or dextroamphetamine* or diacephine or diacetylmorphine or diacetylmorphine or diamorphin* or diamorphine or diaphorin or drug or methadone* or methamphetamine* or morfin* or morphacetin or morphin* or naltrexone or narcotic* or opioid* or opium or polydrug* or psychostimulant* or speed or stimulant* or stimulant* or substance or uppers) near/3 (abstain* or abstinem* or abus* or addict* or (excessive near/1 use*) or dependen* or (inject* near/2 drug*) or intoxicat* or misus* or "over dos*" or overdos* or (use* near/1 (disorder* or illicit)) or withdraw*)) or ((drug or substance) near/1 use*):ab
- #89 #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54 or #55 or #56 or #57 or #58 or #59 or #60
- #90 #61 or #62 or #63 or #64 or #65 or #66 or #67 or #68 or #69 or #70 or #71 or #72 or #73 or #74 or #75 or #76 or #77 or #78 or #79 or #80 or #81 or #82 or #83 or #84 or #85 or #86 or #87 or #88
- #91 #89 or #90
- #92 #22 and #91

1.3 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP Version 2

1. exp prenatal development/ or child development/
2. 1 use emez
3. exp "embryonic and fetal development"/ use mesz
4. 3 use mesz
5. exp infant development/

6. (120 neonatal <birth to age 1 mo> or 140 infancy <2 to 23 mo>)
7. or/5-6 use psych
8. (baby or babies or congenital\$ or embryo\$ or f?etal or f?etus\$ or gestation or infant\$ or intra?uterin\$ or in\$1 uterus or in\$1 utero or neonat\$ or newborn\$ or un?born child\$).ti,ab,hw,id.
9. or/2,4,7-8

1.4 Cochrane Library - Wiley Version 2

1. mesh descriptor: [embryonic and fetal development] explode all trees
2. (baby or babies or congenital* or embryo* or fetal or foetal or fetus* or foetus* or gestation or infant* or intrauterine* or "intra uterin*" or "in uterus" or "in utero" or neonat* or newborn* or "unborn child*" or "un born child*");ti,ab,kw
3. #1 or #2

2. Question specific search strategies - all databases

2.1 Case identification and assessment

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?

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.

3.4 What strategies should be adopted to minimise potential harm to the women or the fetus/infant of these assessments?

2.11 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

- 1 checklist/ or clinical assessment tool/ or clinical assessment/ or clinical evaluation/ or exp computer assisted diagnosis/ or exp diagnostic test/ or functional assessment/ or geriatric assessment/ or mass screening/ or measurement/ or needs assessment/ or newborn screening/ or exp nursing assessment/ or outcome assessment/ or patient assessment/ or predictive value/ or prenatal screening/ or exp psychologic test/ or psychometry/ or rating scale/ or risk assessment/ or scoring system/ or screening test/ or self evaluation/ or semi structured interview/ or "speech and language assessment"/ or structured interview/ or structured questionnaire/ or summated rating scale/
- 2 1 use emez
checklist/ or exp diagnosis, computer-assisted/ or diagnostic tests, routine/ or diagnostic, self evaluation/ or geriatric assessment/ or interview, psychological/ or mass screening/ or needs assessment/ or neonatal screening/ or exp nursing assessment/ or "outcome and process assessment (health care)"/ or "outcome assessment (health care)"/ or exp personality assessment/ or "predictive value of tests"/ or prenatal diagnosis/ or exp psychiatric status rating scales/ or exp psychological tests/ or exp questionnaires/ or risk assessment/
- 3 3 use mesz
attitude measurement/ or exp attitude measures/ or comprehension tests/ or computer assisted diagnosis/ or geriatric assessment/ or group testing/ or individual testing/ or exp inventories/ or measurement/ or needs assessment/ or exp perceptual measures/ or performance tests/ or exp personality measures/ or exp preference measures/ or prenatal diagnosis/ or pretesting/ or professional examinations/ or exp psychiatric evaluation/
- 5 or exp psychodiagnostic interview/ or exp psychological assessment/ or psychometrics/ or exp questionnaires/ or exp rating scales/ or exp reading measures/ or exp retention measures/ or risk assessment/ or exp screening tests/ or exp selection tests/ or self evaluation/ or sensorimotor measures/ or sociometric tests/ or "speech and hearing measures"/ or standardized tests/ or subtests/ or symptom checklists/ or exp testing/ or testing methods/ or exp test scores/ or verbal tests/
- 6 5 use psych

- (index or instrument\$ or interview\$ or inventor\$ or item\$ or measure\$1 or
7 questionnaire\$ or rate\$ or rating or scale\$ or score\$ or screen\$ or (self adj
(assess\$ or report\$)) or subscale\$ or survey\$ or test\$ or tool\$).tw.
8 or/2,4,6-7
9 di.fs. or exp diagnosis/ or exp mass screening/ or screening test/
10 9 use emez
11 di.fs. or exp diagnosis/ or mass screening/ or nursing diagnosis/
12 11 use mesz
13 exp diagnosis/ or exp health screening/ or screening/ or exp screening
tests/
14 13 use psych
15 (assess\$ or detect\$ or diagnos\$ or evaluat\$ or identif\$ or psychodiagnos\$ or
recogni\$ or screen\$).tw.
16 or/10,12,14-15
17 (8 and 16) or (casefind\$ or ((case or tool\$) adj (find\$ or identif\$))).tw.
"area under the curve"/ or predictive validity/ or receiver operating
18 characteristic/ or reliability/ or "sensitivity and specificity"/ or test retest
reliability/ or validity/
19 18 use emez
20 "area under curve"/ or "predictive value of tests"/ or "reproducibility of
results"/ or roc curve/ or "sensitivity and specificity"/ or validation studies/
21 20 use mesz
22 statistical reliability/ or statistical validity/ or test reliability/ or test
validity/
23 22 use psych
(accurac\$ or accurat\$ or area under curve or auc value\$ or (likelihood adj3
ratio\$) or (diagnostic adj2 odds ratio\$) or ((pretest or pre test or posttest or
24 post test) adj2 probabilit\$) or (predict\$ adj3 value\$) or receiver operating
characteristic or (roc adj2 curv\$) or reliabil\$ or sensitiv\$ or specificit\$ or
valid\$).tw.
25 or/19,21,23-24
26 (antenatal psychosocial health assessment or antenatal psycho social health
assessment).tw.
27 antenatal risk questionnaire\$.tw.
28 (bromley adj (postnatal or post natal) adj depression scale).tw.
29 (edinburgh adj (postnatal or post natal) adj depression scale).tw.
30 (maternal adj (antenatal or ante natal) adj attachment scale).tw.
31 ((postpartum or post partum) adj depression screening scale).tw.

- 32 (pregnancy anxiety scale or pregnancy related anxiety scale).tw.
33 or/26-32
34 beck anxiety inventory.tw.
35 beck depression inventory.tw.
36 (center adj2 epidemiologic studies adj2 depression adj2 (instrument or scale)).tw.
37 diagnostic interview schedule.tw.
38 (eysenck personality adj (questionnaire or scale\$)).tw.
39 general health questionnaire.tw.
40 ((hamilton rating scale adj2 depression) or hamilton depression scale).tw.
41 (hospital anxiety adj2 depression scale).tw.
42 (impact adj2 events scale).tw.
43 (inventory adj2 depressive symptomatology).tw.
44 kessler psychological distress scale.tw.
45 lahore inventory.tw.
46 leverton questionnaire.tw.
47 montgomery asberg.tw.
48 mood disorder questionnaire.tw.
49 patient health questionnaire.tw.
50 present state examination.tw.
51 (social support adj (questionnaire or scale)).tw.
52 (schedules for clinical assessment adj2 neuropsychiatry).tw.
53 dyadic adjustment scale.tw.
54 ((state or state trait or strait trait or strait or trait) adj anxiety adj (inventory or scale)).tw.
55 (structured clinical interview adj2 dsm\$).tw.
56 (traumatic events adj (questionnaire or scale)).tw.
57 whooley question\$.tw.
58 zung self-rating depression scale.tw.
59 (anrq or bpds or epds or maas or cds d or cesd or ces d or ghq12 or hrsd or hamd or ham d or hads or madrs or phq9 or phq 9 or scid).tw.
60 ((alpha or pdss or pas or bai or bai or bdi or bdil or bdi ll or bdill or dis or epq or ghq or ies or iesr or ids or idssr or qids or k10 or lq or mdq or phq or pse or pss or psss or sss or scan or sas or stai or tai or tes or teq or sds) adj5 (inventor\$ or questionnaire\$ or scale\$ or schedule\$)).tw.
61 (((17 and 25) or or/34-60) and [APMH population terms - version 1]) or 33

2.2 Interventions for the treatment of mental health problems

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?

2.21 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

- 1 fetus death/ or stillbirth/
- 2 1 use emez
- 3 fetal death/ or stillbirth/
- 4 3 use mesz
- 5 ((fetus or infant or perinatal) and (death or dying)).hw.
- 6 5 use psych
(((baby or birth\$ or born\$ or child\$ or f?etal or f?etus or infant\$ or newborn\$ or neonat\$ or new born\$ or perinatal\$ or peri natal\$) adj3 (dead or death\$ or die\$1 or fatal\$ or lose or losing or lost or mortal\$)) or perinatal\$ loss or perinatal\$ loss or (still adj2 (birth\$ or born\$)) or silent bab\$ or stillbirth\$ or stillborn\$).ti,ab.
- 8 or/2,4,6-7
- 9 human relation/ or parental contact/ or mother child relation/ or touch/ or parent child relation/
- 10 9 use emez
- 11 mother child relations/ or interpersonal relations/ or parent child relations/ or touch/
- 12 11 use mesz
- 13 Interpersonal\$.hw. or mother child relations/ or parent child relations/ or physical contact/ or tactual perception/
- 14 13 use psych
- 15 (cradle or holding).ti,ab.
(((contact\$ or cradl\$ or handl\$ or held\$ or hold\$ or meet\$ or saw or see\$ or touch\$ or view\$) adj3 (baby or birth\$ or born\$ or f?etal or f?etus or infant\$ or newborn\$ or neonat\$ or new born\$ or perinatal\$ or peri natal\$)) or (say\$ adj2 goodbye\$)).ti,ab.
- 16 newborn\$ or neonat\$ or new born\$ or perinatal\$ or peri natal\$)) or (say\$ adj2 goodbye\$)).ti,ab.
- 17 or/10,12,14-16
- 18 8 and 17

2.22 Cochrane Library - Wiley

- 1 mesh descriptor: [fetal death] this term only
- 2 mesh descriptor: [stillbirth] this term only
(((baby or birth* or born* or child* or fetal or foetal or fetus or foetus or infant* or newborn* or neonat* or "new born*" or perinatal* or "peri natal*"))
- 3 near/3 (dead or death* or die* or fatal* or lose or losing or lost or mortal*) or "perinatal* loss" or "peri natal* loss" or (still near/2 (birth* or born*)) or "silent bab*" or stillbirth* or stillborn*)
- 4 #1 or #2 or #3
- 5 mesh descriptor: [mother-child relations] explode all trees
- 6 mesh descriptor: [parent-child relations] this term only
- 7 mesh descriptor: [interpersonal relations] this term only
- 8 mesh descriptor: [touch] this term only
- 9 mj (cradle or holding)
(((contact* or cradl* or handl* or held* or hold* or meet* or saw or see* or touch* or view*) near/3 (baby or birth* or born* or fetal or foetal or fetus or foetus or infant* or newborn* or neonat* or "new born*" or perinatal* or "peri natal*")) or (say* near/2 goodbye*))
- 10
- 11 #5 or #6 or #7 or #8 or #9 or #10
- 12 #4 and #11

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?

2.23 Embase, MEDLINE, PreMEDLINE, PsycINFO - OVID SP

- 1 antidepressant agent/ use emez
- 2 antidepressive agents/ or serotonin uptake inhibitors/ or monoamine oxidase inhibitors/
- 3 2 use mesz
- 4 antidepressant drugs/ or serotonin reuptake inhibitors/ or monoamine oxidase inhibitors/

- 5 4 use psych
6 (tricyclic\$ or tca\$1).ti,ab.
7 (ssri\$ or ((serotonin or 5 ht or 5 hydroxytryptamine) adj (uptake or reuptake
or re uptake) adj inhibit\$)).ti,ab.
8 (antidepress\$ or anti depress\$ or maoi\$1 or ((adrenaline or amine or mao or
mono amin\$ or monoamin\$ or tyramin\$) adj2 inhibit\$)).ti,ab.
9 (snri\$ or ssni\$ or ((noradrenalin or norepinephrine) adj serotonin adj
(uptake or reuptake or re uptake) adj inhibitor\$) or (serotonin adj
(noradrenalin or norepi- nephine) adj (uptake or reuptake or re uptake) adj
inhibitor\$)).ti,ab.
10 (agomelatin\$ or amitriptylin\$ or citalopram or clomipramin\$ or dosulepin
or dothiepin or doxepin or duloxetine\$ or escitalopram or fluoxetine\$ or
flupentixol or flupenthixol or fluvoxamin\$ or imipramin\$ or isocarboxazid
or lofepramin\$ or mianserin or mirtazapin\$ or moclobemid\$ or nortriptylin\$
or paroxetine\$ or phenelzin\$ or phenothiazin\$ or reboxetin\$ or sertraline\$ or
tranylcypromin\$ or trazodon\$ or trimipramin\$ or venlafaxin\$).ti,ab,hw.
11 or/1,3,5-10
12 neuroleptic agent/ use emez
13 antipsychotic agents/ use mesz
14 neuroleptic drugs/ use psych
15 (antipsychotic\$ or anti psychotic\$ or (major adj2 (butyrophenon\$ or
phenoth- iazin\$ or tranquil\$)) or neuroleptic\$).ti,ab.
16 (benzamide\$ or butrophenone\$ or diphenylbutylpiperidine\$ or
phenothiazine\$).ti,ab.
17 (amisulprid\$ or aripiprazole or asenapin\$ or benperidol or chlorpromazin\$
or clozapin\$ or flupentixol or fluphenazin\$ or haloperidol or
levomepromazin\$ or methotrimeprazin\$ or olanzapin\$ or paliperidon\$ or
pericyazin\$ or periciazin\$ or perphenazin\$ or pimozide or pipotiazin\$ or
pipothiazin\$ or prochlorperazin\$ or promazin\$ or propericiazin\$ or
quetiapin\$ or risperidon\$ or sulpiride or trifluoperazin\$ or trifluoperaz or
zuclopentixol or zuclopenthixol).ti,ab,hw.
18 or/12-17
19 antihistaminic agent/ use emez
20 histamine antagonists/ use mesz
21 antihistaminic drugs/ use psych
22 (antihistamin\$ or anti histamin\$ or (histamin\$ adj2 (antagonist\$ or
block\$))).ti,ab.
23 promethazin\$.ti,ab,hw.
24 or/19-23

- 25 anticonvulsive drugs/ use psych
- 26 anticonvulsive agent/ use emez
- 27 anticonvulsants/ use mesz
- 28 (anticonvuls\$ or anti convuls\$ or antiepilept\$ or anti epilep\$).ti,ab.
(carbamazepin\$ or eslicarbazepin\$ or ethosuximide or lamotrigin\$ or
- 29 oxcarbazepin\$ or phenytoin or primidon\$ or rufinamid\$ or topiramate or
vigabatrin).ti,ab,hw.
- 30 or/25-29
- 31 hypnotic agent/ use emez
- 32 "hypnotics and sedatives"/ use mesz
- 33 hypnotic drugs/ use psych
- 34 hypnotic\$.ti,ab. or (zopiclon\$ or zolpidem or zaleplon).ti,ab,hw.
- 35 or/31-34
- 36 benzodiazepine derivative/ use emez
- 37 benzodiazepines/ use mesz,psych
- 38 (benzo\$1 or benzodiazepin\$).ti,ab.
- 39 sedative agent/ use emez
- 40 sedatives/ use psych
- 41 tranquilizing drugs/ use psych
- 42 (sedative\$ or tranquili\$).ti,ab.
- 43 (alprazolam or buspiron\$ or chlordiazepoxid\$ or diazepam or lorazepam or
oxazepam).ti,ab,hw.
- 44 or/36-43
- 45 anxiolytic agent/ use emez
- 46 anti-anxiety agents/ use mesz
(((antianxiety or anti anxiety or ataractic) adj2 (agent\$ or drug\$ or treat\$)) or
- 47 anxiolytic\$ or ((medium or minor) adj2 tranquil\$) or (serotonergic adj
(agent\$ or drug\$ or preparation\$))).ti,ab.
- 48 meprobamate.ti,ab,hw.
- 49 or/45-48
- 50 central stimulant agent/ use emez
- 51 central nervous system stimulants/ use mesz
- 52 cns stimulating drugs/ use psych
- 53 stimulant\$.ti,ab.
- 54 (atomoxetin\$ or dexamfetamin\$ or dextroamphetamin\$ or
methylphenidate).ti,ab,hw.
- 55 or/50-54

- 56 (carbamazepin\$ or hypericum or lithium\$ or st john\$ wart or valproate or valproic acid).ti,ab,hw.
(acamprosate or baclofen or buprenorphin\$ or carbamazepin\$ or
57 chlordiazepoxide or chlormethiazole or clomethiazole or clonidin\$ or disulfiram or lofexidin\$ or methadone or naltrexon\$).ti,ab,hw.
58 psychotropic\$.ti,ab.
59 or/56-58
60 or/11,18,24,30,35,44,49,55,59
exp newborn disease/ use emez or exp pregnancy disorder/ use emez or exp prenatal disorder/ use emez or exp "congenital, hereditary, and
61 neonatal diseases and abnormalities"/ use mesz or exp pregnancy complications/ use mesz or exp congenital disorders/ use psyh or exp neonatal disorders/ use psyh
((baby or babies or congenital\$ or embryo\$ or f?etal or f?etus\$ or gestation or infant\$ or intra?uterin\$ or in\$1 uterus or in\$1 utero or neonat\$ or
62 newborn\$ or un?born child\$) adj3 (abnormal\$ or anomal\$ or defect\$ or deficient\$ or deform\$ or disease\$ or disorder\$ or dysfunction\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)) or (development\$ adj3 (defect\$ or deformit\$ or malform\$)).ti,ab.
63 agranulocytosis/ use emez,mesz
64 (agranulocytosis or granulopenia or pan?leukopenia).ti,ab.
65 cleft palate/ use emez,mesz,psyh
66 (((cleft or jaw) adj2 palat\$) or palat?schi?is or palatum fissum).ti,ab.
67 cleft face/ use emez
68 (cleidofacial dysplasia or ((face or facial) adj3 cleft) or schistoprosopia or schizoprosopia).ti,ab.
69 crying/ use emez,mesz,psyh
70 ((constant\$ or continue\$ or incessant or regular or ongoing or perpetual or persist\$ or recurr\$) adj2 cry\$).ti,ab.
71 febrile convulsion/ use emez or seizure/ use emez or seizures, febrile/ use mesz or seizures/ use mesz or seizures/ use psyh
72 (convuls\$ or epilep\$ or seizure\$).ti,ab.
73 exp diabetes mellitus/ use emez,mesz or exp diabetes/ use psyh
74 nephrogenic diabetes insipidus/ use emez or diabetes insipidus, nephrogenic/ use mesz or exp hypoglycemia / use emez,mesz, psyh
75 (diabet\$ or hypo?glycaemi\$).ti,ab.
76 exp extrapyramidal syndrome/ use emez or exp basal ganglia diseases/ use mesz or extrapyramidal symptoms/ use psyh

- 77 (((basal adj (ganglia or ganglion)) or extra?pyramidal) adj2 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or disease\$ or disorder\$ or disturbance or dysfunction\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)).ti,ab.
- 78 exp face malformation/ use emez or facial hemiatrophy/ use mesz
(((face or facial or hemiafac\$) adj (atroph\$ or dysmorph\$ or hemiatroph\$ or abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or disease\$ or disorder\$ or disturbance or dysfunction\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)) or romberg\$).ti,ab.
- 79
- 80 infantile hypotonia/ use emez
- 81 (floppy adj2 (baby or babies or child\$ or infant\$)).ti,ab.
- 82 exp muscle hypertonia/ use emez,mesz
- 83 (hypertonia or hypertonus or (muscl\$ adj2 (atonic or contract\$ or flaccid\$ or hyperton\$ or (poor\$ adj2 tone) or rigid\$ or stiff\$)) or spastic\$).ti,ab.
- 84 hypothermia/ use emez,mesz,psych
- 85 hypotherm\$.ti,ab.
- 86 irritability/ use emez,psych or irritable mood/ use mesz
- 87 irritab\$.ti,ab.
- 88 nervousness/ use emez, psych
- 89 (jitter\$ or nervosity or nervous\$).ti,ab.
- exp high birth weight/ use emez or exp low birth weight/ use emez or
90 *birth weight/ use mesz or exp infant, low birth weight/ use mesz or weight gain/ use emez, mesz, psych
- 91 (((high or low) adj birth?weight) or ((lbw or over?weight or under?weight) adj2 (infant\$ or neonat\$ or newborn\$))).ti,ab.
- 92 infantile spasm/ use emez or seizures/ use mesz or exp seizures/ use psych (flexor spasm or ((infant\$ or neonat\$) adj2 (seizure\$ or spasms or spasmus))
93 or jack knife seizure or minor motor epilepsy or (myoclonic adj2 infant\$ adj2 encephalopathy) or propulsive petit mal or spasm in\$1 flexion).ti,ab.
- 94 exp neural tube defect/ use emez or exp neural tube defects/ use mesz (dysraphia or dysraphic or dysraphism or dysraphy or (neural tube adj2
95 (closure or defect\$ or malform\$)) or (spina\$ adj (dysraphism or bifida))).ti,ab.
- 96 feeding disorder/ use emez
- 97 ((poor adj2 feed\$) or failure to thrive).ti,ab.
- 98 premature birth/ or premature labor/ use emez or premature birth/ use mesz

- (anoxia or asphyxia or hypoxia or ((premature or pre?term) adj2 (baby or
99 birth\$ or deliver\$ or child\$ or infant\$ or labour\$ or labor\$ or neonat\$ or
newborn\$)) or prematurity).ti,ab.
exp "eclampsia and preeclampsia"/ use emez or exp pulmonary
100 hypertension/ use emez or exp hypertension, pulmonary/ use mesz or exp
Hypertension, Pregnancy-Induced/ use mesz or hypertension/ use psych
101 (hypertens\$ or (persistent f?etal adj3 circulation) or pre?eclamp\$).ti,ab.
102 prolactin/ use emez,mesz,psych
((ferolactan or galactin or lactogen\$ or lactotrophic or lactotropic or
lactotropin or lth or luteotrope or luteotrophic or luteotrophin\$ or
103 luteotropic or luteotropin or mammatropic or mammotropin\$ or nin pd 3 or
nin pd3 or prl or prolactin\$) adj3 (elevat\$ or heighten\$ or high\$ or increas\$
or rais\$)).ti,ab.
104 expl respiratory distress syndrome/ use emez or exp respiratory distress
syndrome/ use mesz or exp respiratory distress/ use psych
105 ((respirat\$ adj2 (depress\$ or distress\$ or inhibit\$ or insuffic\$)) or rds).ti,ab.
106 restlessness/ use emez,psych or psychomotor agitation/ use mesz
107 (agitat\$ or restless\$).ti,ab.
108 sedation/ use emez or conscious sedation/ use mesz or deep sedation/ use
mesz or sedatives/ use psych
109 sedat\$.ti,ab.
110 seizure/ use emez or seizures, febrile/ use emez or seizures/ use mesz or
seizures, febrile/ use mesz or seizures/ use psych
111 (seizur\$ or ((epilep\$ or febril\$ or fever or pyrexial) adj3 (attack\$ or convuls\$
or fit\$ or insult))).ti,ab.
112 shivering/ use emez,mesz or "thermoregulation (body)"/
113 shiver\$.ti,ab.
114 spontaneous abortion/ use emez,psych or exp abortion, spontaneous/ use
mesz
115 ((spontaneous adj2 abort\$) or ((loss\$ or lose) adj2 (baby or embryo or
neonat\$)) or miscar\$ or mis car\$).ti,ab.
116 stevens-johnson syndrome/ use emez,mesz
117 ((ectodermosis adj3 pluriorificial\$) or (erythema adj3 multiforme) or rend\$
fiessinger or (steven\$ adj3 johnson)).ti,ab.
teratogenicity/ use emez or exp teratogenic agent/ use emez or
118 abnormalities, drug-induced/ use mesz or exp teratogens/ use mesz or
teratogens/ use psych
119 teratogen\$.ti,ab.
120 exp tremor/ use emez,mesz,psych

- 121 (tremor\$ or tremulousness).ti,ab.
- 122 weight gain/ use emez,mesz,psych
- 123 ((body size or weight\$) adj2 (gain\$ or increas\$ or put\$ on\$1)).ti,ab.
- 124 apgar score/ use emez,mesz
((abnormal\$ or anomal\$ or decreas\$ or defect\$ or deficien\$ or disorder\$ or
- 125 disturbance\$ or dysfunction\$ or fall\$ or instabilit\$ or low or instabilit\$ or
problem\$ or reduc\$) adj2 apgar\$).ti,ab.
- 126 cleft lip palate/ use emez or cleft lip/ use emez,mesz
- 127 (cheiloschisis or ((cleft\$ or hare) adj2 lip\$) or harelip\$ or labioschi?is or
labiopalatoschisis or palatolabioschisis).ti,ab.
withdrawal syndrome/ use emez or neonatal abstinence syndrome/ or exp
- 128 substance withdrawal syndrome/ use mesz or exp drug withdrawal/ use
psych
- 129 (((abstain\$ or abstinence or passive addiction\$ or with draw\$ or
withdrawal\$) adj3 (neonat\$ or syndrom\$ or symptom\$)) or craving).ti,ab.
cognitive defect/ use emez or exp cognition disorders/ use mesz or
- 130 cognitive impairment/ use psych or (motor performance or motor skills or
motor processes).sh.
(((cogniti\$ or emotion\$) adj3 (abnormal\$ or anomal\$ or defect\$ or deficien\$
- 131 or disabilit\$ or disorder\$ or dysfunction\$ or impair\$ or problem\$ or
reduc\$)) or (motor adj (function\$ or performanc\$ or process\$ or skill\$)) or
response interference).ti,ab.
- 132 brain size/ use emez,psych or *cerebral cortex/ use mesz or *brain/ use mesz
or brain weight/ use psych
- 133 ((circumference or decreas\$ or reduc\$ or small\$) adj2 (brain\$ or head or
sub?cortical)).ti,ab.
- 134 hypospadias\$.ti,ab,hw.
(((digit\$ or ear or face or finger\$ or hand\$1 or mouth or neck) adj3
- 135 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or disabilit\$ or
disorder\$ or dysfunction\$ or hypoplasia or impair\$ or malform\$ or missing
or problem\$)) or perodactylia).ti,ab.
- 136 (serotonin/ae, to use emez or (serotonin\$.hw. and to.fs. use mesz) or
(serotonin/ and toxicity/ use psych)]
- 137 (serotonin and (harm\$ or poison\$ or toxic\$)).ti,ab,hw.
- 138 exp cardiovascular disease/ use emez or exp cardiovascular diseases/ use
mesz or exp cardiovascular disorders/ use psych
(((atrial\$ or aorta or cardiac\$ or cardiovasc\$ or coronar\$ or heart\$ or
- 139 myocard\$ or pulmonar\$ or vascular\$ or ventricular) adj5 (abnormal\$ or
angio?plast\$ or anomal\$ or bypass\$ or coarctation or defect\$ or deficien\$ or

- deform\$ or disease\$ or disabilit\$ or disorder\$ or disturbance\$ or dysplasi\$ or dysfunction\$ or hypertrop\$ or impair\$ or infarct\$ or instabilit\$ or isch?emi\$ or malform\$ or problem\$ or syndrome\$ or thrombo\$) or arteriosus or cardio?path\$ or echo?cardio\$ or (heart\$ adj2 (block or distress\$ or failure)) or hypertens\$ or ((holt oram or leopard or (mckusick adj2 kaufman)) adj2 (diseas\$ or syndrom\$)).ti,ab.
- 140 exp gastrointestinal disease/ use emez or exp gastrointestinal diseases/ use mesz or exp gastrointestinal disorders/ use psyh
((alimentary tract or gastro?ent\$ or gastro?intestin\$) adj5 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or disease\$ or disorder\$ or dysfunction\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)).ti,ab.
- 141
- 142 exp kidney disease/ use emez or exp kidney diseases/ use mesz, psyh
((kidney or renal) adj3 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or disabilit\$ or disease\$ or disorder\$ or disturbance\$ or dysfunction\$ or impair\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)).ti,ab.
- 143
- 144 exp thyroid disease/ use emez or congenital hypothyroidism/ use mesz or exp thyroid diseases/ use mesz or exp thyroid disorders/ use psyh
((thyroid\$ adj5 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or disabilit\$ or disease\$ or disorder\$ or disturbance\$ or dysfunction\$ or impair\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)) or cretin\$ or hyperthyroid\$).ti,ab.
- 145
- 146 exp "disorders of carbohydrate metabolism"/ use emez or exp glucose metabolism disorders/ use mesz or glucose metabolism/ use psyh
((carboxylase or carobohydrate or glucos\$ or holocarboxylase) adj5 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or deform\$ or disabilit\$ or disease\$ or disorder\$ or disturbance\$ or dysfunction\$ or error\$ or impair\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)) or cdg syndrome\$ or mckusick).ti,ab.
- 147
- 148 exp "disorders of lipid and lipoprotein metabolism"/ use emez or exp lipid metabolism disorders/ use mesz,psyh
(lipid\$ adj5 (abnormal\$ or anomal\$ or defect\$ or deficien\$ or disease\$ or disorder\$ or disturbance\$ or dysfunction\$ or error\$ or impair\$ or instabilit\$ or malform\$ or problem\$ or syndrome\$)).ti,ab.
- 149
- 150 breech presentation/ or exp induced abortion/ or exp instrumental delivery/ or labor induction/ or premature labor/
- 151 150 use emez
exp abortion, induced/ or breech presentation/ or exp cesarean section/ or
- 152 exp extraction, obstetrical/ or labor, induced/ or exp obstetric labor, premature/

153 152 use mesz

154 induced abortion/ or premature birth/

155 154 use psych

(ca?sarean or ((breech\$ or forced or forcep\$ or induce\$ or instrumental or
156 mechanical or premature or pre?term) adj2 (abort\$ or birth or delivery or
extraction or labo?r\$ or presentation))).ti,ab.

157 *autism/ use emez, psych or *autistic disorder/ use mesz

158 infantile autism.ti,ab.

159 or/61-149,151,153,155-158

160 (ae or it or si or to).fs.

exp adverse drug reaction/ or drug contraindication/ or exp "drug toxicity
and intoxication"/ or drug interaction/ or drug monitoring/ or drug
161 safety/ or drug surveillance program/ or drug tolerability/ or drug
tolerance/ or phase 4 clinical trial/ or postmarketing surveillance/ or exp
complication/ or risk/ or risk assessment/ or risk factor/ or exp side effect/
or exp toxicity/

162 or/160-161 use emez

163 (ae or co or ct or de or po or mo or to).fs.

abnormalities, drug induced/ or clinical trial, phase iv/ or exp "drug-
related side effects and adverse reactions"/ or drug interactions/ or drug
164 hypersensitivity/ or drug interaction/ or drug monitoring/ or drug
tolerance/ or intraoperative complications/ or exp poisoning/ or exp
postoperative complication/ or exp product surveillance, postmarketing/ or
risk/ or risk assessment/ or risk factors/

165 or/163-164 use mesz

"complications (disorders)"/ or drug interactions/ or drug tolerance/ or
166 postsurgical complications/ or risk assessment/ or risk factors/ or exp "side
effects (treatment)"/ or exp toxic disorders/ or exp toxicity/

167 166 use psych

(odds ratio or (risk\$ adj2 (factor\$ or increas\$ or relative)) or predispos\$ or
causa\$ or (((adverse or negativ\$ or side or undesir\$ or unwanted) adj2
(effect\$ or event\$ or outcome\$ or reaction\$)) or discontinuation effect\$ or
168 poison\$ or toxic\$) or (caution\$ or complication\$ or contraindicat\$ or contra
indicat\$ or death\$ or harm\$ or hazard\$ or interaction\$1 or lethal\$ or safety
or safe or tolerab\$ or intolerab\$ or warning\$) or (treatment emergent or
adrs)).ti,ab. or (intoxicat\$ or overdos\$).ti,ab,hw.

169 or/162,165,167-168

170 159 or 169

160 (or/11,18,23,29,34,44,49,55,59 or (or/24,30,35 and [8 from APMH root version 1])) and [74 from APMH root version 1] and 170

3 Study design filters – all databases

3.1 Health economic and quality of life study design filter

Embase, MEDLINE, PreMEDLINE, PsycINFO – OVID SP

- 1 budget/ or exp economic evaluation/ or exp fee/ or funding/ or exp health care cost/ or health economics/ or exp pharmacoeconomics/ or resource allocation/
- 2 1 use emez
- 3 exp budgets/ or exp “costs and cost analysis”/ or economics/ or exp economics, hospital/ or exp economics, medical/ or economics, nursing/ or economics, pharmaceutical/ or exp “fees and charges”/ or exp resource allocation/ or value of life/
- 4 3 use mesz, prem
- 5 exp "costs and cost analysis"/ or "cost containment"/ or economics/ or finance/ or funding/ or health care economics/ or pharmacoeconomics/ or exp professional fees/ or resource allocation/
- 6 5 use psych
- 7 (cost\$ or economic\$ or pharmacoeconomic\$ or pharmaco economic\$).ti. or (cost\$ adj2 (effective\$ or utilit\$ or benefit\$ or minimi\$)).ab. or economic model\$.tw. or (budget\$ or fee or fees or financ\$ or price or prices or pricing or resource\$ allocat\$ or (value adj2 (monetary or money))).ti,ab.
- 8 decision theory/ or decision tree/ or monte carlo method/ or *nonbiological model/ or (statistical model/ and exp economic aspect/) or stochastic model/ or *theoretical model/
- 9 8 use emez
- 10 exp decision theory/ or markov chains/ or exp models, economic/ or *models, organizational/ or *models, theoretical/ or monte carlo method/
- 11 10 use mesz, prem
- 12 exp decision theory/ or exp stochastic modeling/
- 13 12 use psych
- 14 ((decision adj (analy\$ or model\$ or tree\$)) or economic model\$ or markov or monte carlo).ti,ab.
- 15 quality adjusted life year/ or "quality of life index"/ or short form 12/ or short form 20/ or short form 36/ or short form 8/ or sickness impact profile/
- 16 15 use emez
- 17 quality-adjusted life years/ or sickness impact profile/
- 18 17 use mesz, prem

- 19 "*quality of life"/
20 19 use psych
21 (((disability or quality) adj adjusted) or (adjusted adj2 life)).ti,ab.
22 (disutili\$ or (utilit\$ adj1 (health or score\$ or value\$ or weigh\$))).ti,ab.
23 (health year equivalent or hye or hyes).ti,ab.
24 (daly or qal or qald or qale or qaly or qtime\$ or qwb\$).ti,ab.
25 discrete choice.ti,ab.
26 (euroqol\$ or euro qol\$ or eq5d\$ or eq 5d\$).ti,ab.
27 (hui or hui1 or hui2 or hui3).ti,ab.
28 ((quality adj2 (wellbeing or well being)) or quality adjusted life or qwb or
29 (value adj2 (money or monetary))).ti,ab.
30 (qol or hql\$ or hqol\$ or h qol\$ or hrqol or hr qol or hr ql or hrql).ti,ab.
31 rosser.ti,ab.
32 sickness impact profile.ti,ab.
33 (standard gamble or time trade\$ or tto or willingness to pay).ti,ab.
34 (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six
35 or shortform thirtysix or shortform thirty six or short form thirtysix or
36 short form thirty six).ti,ab.
37 (sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six
38 or short form six).ti,ab.
39 (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or
40 shortform twelve or short form twelve).ti,ab.
41 (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or
42 shortform sixteen or short form sixteen).ti,ab
43 (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or
44 shortform twenty or short form twenty).ti,ab.
45 or/ 2,4,6-7,9,11,13-14,16,18,20-37

APPENDIX 12: EVIDENCE SYNTHESIS METHODS

Synthesising the evidence from test accuracy studies

Meta-analysis

Review Manager was used to summarise test accuracy data from each study using forest plots and summary ROC plots. Where more than two studies reported appropriate data, a bivariate test accuracy meta-analysis was conducted using Meta-DiSc (Zamora *et al.*, 2006) in order to obtain pooled estimates of sensitivity, specificity, and positive and negative likelihood ratios.

Sensitivity and specificity

The sensitivity of an instrument refers to the probability that it will produce a true positive result when given to a population with the target disorder (as compared to a reference or “gold standard”). An instrument that detects a low percentage of cases will not be very helpful in determining the numbers of service users who should receive further assessment or a known effective intervention, as many individuals who should receive the treatment will not do so. This would lead to an under-estimation of the prevalence of the disorder, contribute to inadequate care and make for poor planning and costing of the need for treatment. As the sensitivity of an instrument increases, the number of false negatives it detects will decrease.

The specificity of an instrument refers to the probability that a test will produce a true negative result when given to a population without the target disorder (as determined by a reference or “gold standard”). This is important so that people without the disorder are not offered further assessment or interventions they do not need. As the specificity of an instrument increases, the number of false positives will decrease.

To illustrate this: from a population in which the point prevalence rate of anxiety is 10% (that is, 10% of the population has anxiety at any one time), 1000 people are given a test that has 90% sensitivity and 85% specificity. It is known that 100 people in this population have anxiety, but the test detects only 90 (true positives), leaving 10 undetected (false negatives). It is also known that 900 people do not have anxiety, and the test correctly identifies 765 of these (true negatives), but classifies 135 incorrectly as having anxiety (false positives). The positive predictive value of the test (the number correctly identified as having anxiety as a proportion of positive tests) is 40% ($90/90+135$), and the negative predictive value (the number correctly identified as not having anxiety as a proportion of negative tests) is 98% ($765/765+10$). Therefore, in this example, a

positive test result is correct in only 40% of cases, while a negative result can be relied upon in 98% of cases.

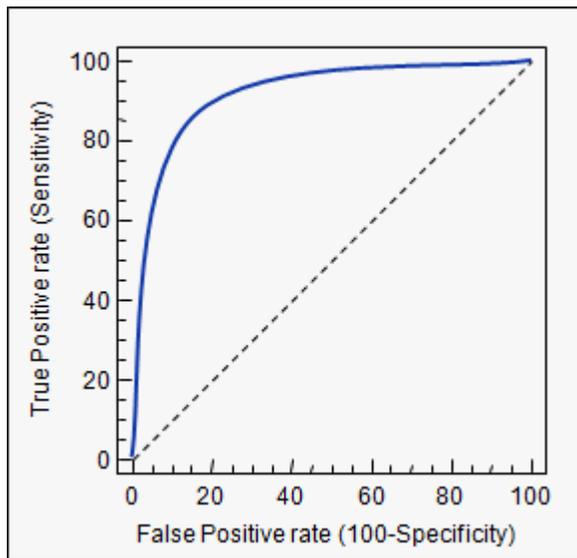
The example above illustrates some of the main differences between positive predictive values and negative predictive values in comparison with sensitivity and specificity. For both positive and negative predictive values, prevalence explicitly forms part of their calculation (see Altman & Bland, 1994a). When the prevalence of a disorder is low in a population this is generally associated with a higher negative predictive value and a lower positive predictive value. Therefore although these statistics are concerned with issues probably more directly applicable to clinical practice (for example, the probability that a person with a positive test result actually has anxiety) they are largely dependent on the characteristics of the population sampled and cannot be universally applied (Altman & Bland, 1994a).

On the other hand, sensitivity and specificity do not necessarily depend on prevalence of anxiety (Altman & Bland, 1994b). For example, sensitivity is concerned with the performance of an identification instrument conditional on a person having anxiety. Therefore the higher false positives often associated with samples of low prevalence will not affect such estimates. The advantage of this approach is that sensitivity and specificity can be applied across populations (Altman & Bland, 1994b). However, the main disadvantage is that clinicians tend to find such estimates more difficult to interpret.

When describing the sensitivity and specificity of the different instruments, the GDG defined values above 0.9 as 'excellent', 0.8 to 0.9 as 'good', 0.5 to 0.7 as 'moderate', 0.3 to 0.4 as 'low', and less than 0.3 as 'poor'.

Receiver operator characteristic curves

The qualities of a particular tool are summarised in a receiver operator characteristic (ROC) curve, which plots sensitivity (expressed as a per cent) against (100-specificity) (see Figure 1).

Figure 1: Receiver operator characteristic (ROC) curve

A test with perfect discrimination would have an ROC curve that passed through the top left hand corner; that is, it would have 100% specificity and pick up all true positives with no false positives. While this is never achieved in practice, the area under the curve (AUC) measures how close the tool gets to the theoretical ideal. A perfect test would have an AUC of 1, and a test with AUC above 0.5 is better than chance. As discussed above, because these measures are based on sensitivity and 100-specificity, theoretically these estimates are not affected by prevalence.

Negative and positive likelihood ratios

Positive (LR+) and negative (LR-) likelihood ratios are thought not to be dependent on prevalence. LR+ is calculated by sensitivity/(1-specificity) and LR- is (1-sensitivity)/specificity. A value of LR+ >5 and LR- <0.3 suggests the test is relatively accurate (Fischer *et al.*, 2003).

Heterogeneity

Heterogeneity is usually much greater, and is to be expected, in meta-analyses of test accuracy studies compared with meta-analyses of RCTs (Macaskill *et al.*, 2010). Therefore, a higher threshold for acceptable heterogeneity in such meta-analyses is required. However, when pooling studies resulted in $I^2 > 90\%$, meta-analyses were not conducted.

Synthesising the evidence for the effectiveness of interventions

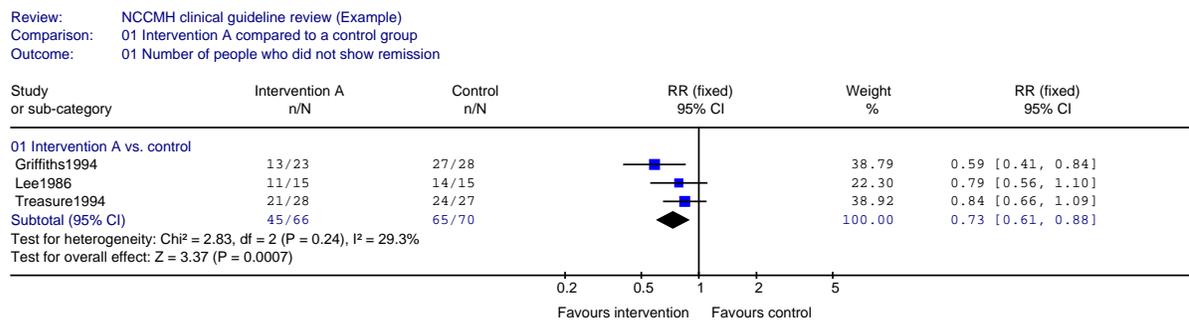
Meta-analysis

Where appropriate, meta-analysis was used to synthesise evidence for the effectiveness of interventions using Review Manager Version 5.2. If necessary, re-analyses of the data or sub-analyses were used to answer review questions not addressed in the original studies or reviews.

Dichotomous outcomes were analysed as relative risks (RR; also called a risk ratio) or odds ratios (ORs) with the associated 95% CI (see Figure 2 for an example of a forest plot displaying dichotomous data). An RR is the ratio of the treatment event rate to the control event rate. An RR of 1 indicates no difference between treatment and control. In Figure 2, the overall RR of 0.73 indicates that the event rate (in this case, rate of non-remission) associated with intervention A is about three-quarters of that of the control intervention or, in other words, the reduction in the relative risk is 27%.

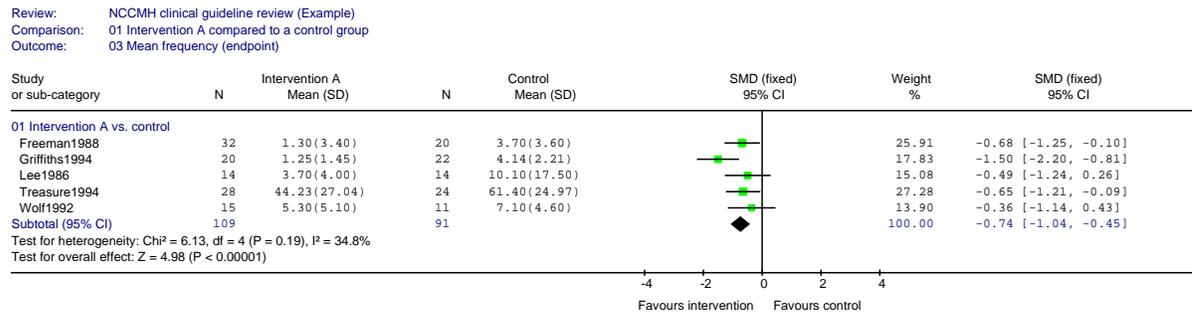
The CI shows a range of values within which it is possible to be 95% confident that the true effect will lie. If the effect size has a CI that does not cross the 'line of no effect', then the effect is commonly interpreted as being statistically significant.

Figure 2: Example of a forest plot displaying dichotomous data



Continuous outcomes were analysed using the mean difference (MD) or standardised mean difference (SMD) when different measures were used in different studies to estimate the same underlying effect (see Figure 3 for an example of a forest plot displaying continuous data). If reported by study authors, ITT data, using a valid method for imputation of missing data, were preferred over data only from people who completed the study.

Figure 3: Example of a forest plot displaying continuous data



Heterogeneity

To check for consistency of effects among studies, both the I^2 statistic and the chi-squared test of heterogeneity, as well as a visual inspection of the forest plots were used. The I^2 statistic describes the proportion of total variation in study estimates that is due to heterogeneity (Higgins & Thompson, 2002). For meta-analyses of comparative effectiveness studies, the I^2 statistic was interpreted in the following way based on guidelines from the Cochrane Collaboration (Higgins & Green, 2011):

- 0% to 40%: might not be important
- 30% to 60%: may represent moderate heterogeneity
- 50% to 90%: may represent substantial heterogeneity
- 75% to 100%: considerable heterogeneity.

The Cochrane Collaboration advice suggests that overlapping categories are less misleading than simple thresholds since the importance of inconsistency depends on (1) the magnitude and direction of effects, and (2) the strength of evidence for heterogeneity (for example, p value from the chi-squared test, or a CI for I^2).

Publication bias

Where there was sufficient data, funnel plots were used to explore the possibility of publication bias. Asymmetry of the plot would be taken to indicate possible publication bias and investigated further.

Where necessary, an estimate of the proportion of eligible data that were missing (because some studies did not include all relevant outcomes) was calculated for each analysis.

Synthesising the evidence for the harms of interventions

Meta-analysis

Where appropriate, meta-analysis was used to synthesise evidence for the harms of interventions using Review Manager Version 5.2. Dichotomous outcomes were analysed as odds ratios (ORs), the OR is the ratio of the odds of an event (the odds of the outcome in one group divided by the odds of the outcome in the other group). ORs can be more difficult to interpret than RRs, however, it is not meaningful to calculate the risk ratio for a case-control study as participants are selected on the basis of the outcome of interest (rather than on the basis of exposure status) and are not tracked over time. Unlike cohort studies which examine the risk of the incidence of an outcome in different groups, case-control studies examine the strength of an association between a risk factor and outcome. Using ORs allowed case-control and cohort study designs to be combined in meta-analysis. However, the difference between odds and risk is small when an event is rare, as is usually the case with respect to harms. Consistent with the RR an OR of 1 indicates no difference between treatment and control, or in this case between exposed and unexposed. Where possible the absolute risk difference, in this case the difference between the proportion of the exposed group with the harm and the proportion of the unexposed group with the harm, was calculated and considered. Mantel-Haenszel methods were used as standard. However, where there were zero counts in the same cell across studies and there were unequal sample sizes between exposed and unexposed arms, the Peto odds ratio method was used instead. This was because Mantel-Haenszel methods apply zero count corrections (add a fixed value of 0.5 to all cells of study results tables) in order to avoid computational problems, however, where the sizes of the study arms are unequal this correction will introduce a directional bias in the treatment effect. The Peto odds ratio method only encounters computation problems when there are no events occurring in all arms of all studies.

APPENDIX 13: METHODOLOGY CHECKLIST FOR CLINICAL STUDIES AND REVIEWS

Study identification <i>Include author, title, reference, year of publication</i>			
Guideline topic:	Review question no:		
Checklist completed by:			
SCREENING QUESTIONS			
In a well-conducted, relevant systematic review:	<i>Circle or highlight one option for each question</i>		
The review addresses an appropriate and clearly focused question that is relevant to the guideline review question	Yes	No	Unclear
The review collects the type of studies you consider relevant to the guideline review question	Yes	No	Unclear

The literature search is sufficiently rigorous to identify all the relevant studies	Yes	No	Unclear
Study quality is assessed and reported	Yes	No	Unclear
An adequate description of the methodology used is included, and the methods used are appropriate to the question	Yes	No	Unclear

APPENDIX 14: METHODOLOGY CHECKLIST TEMPLATE FOR ECONOMIC STUDIES

Study identification <i>Include author, title, reference, year of publication</i>		
Guideline topic:		Question no:
Checklist completed by:		
Section 1: Applicability (relevance to specific guideline review question(s) and the NICE reference case⁴) <i>This checklist should be used first to filter out irrelevant studies.</i>	Yes/ Partly/ No /Unclear /NA	Comments

⁴ As detailed in chapter 5 of NICE's [Guide to the methods of technology appraisal](#). The guide notes that there may be important barriers to applying reference-case methods, and in these cases the reasons for not applying reference-case methods should be clearly specified and justified, and the likely implications should, as far as possible, be quantified.

<p>1.1 Is the study population appropriate for the guideline?</p>		
<p>1.2 Are the interventions and services appropriate for the guideline?</p>		
<p>1.3 Is the healthcare system in which the study was conducted sufficiently similar to the current UK NHS context?</p>		
<p>1.4 Are costs measured from the NHS and personal social services (PSS) perspective?</p>		

<p>1.5 Are non-direct health effects on individuals excluded?</p>		
<p>1.6 Are both costs and health effects discounted at an annual rate of 3.5%?</p>		
<p>1.7 Is the value of health effects expressed in terms of quality-adjusted life years (QALYs)?</p>		
<p>1.8 Are changes in health-related quality of life (HRQoL) reported directly from patients and/or carers?</p>		

<p>1.9 Is the valuation of changes in HRQoL (utilities) obtained from a representative sample of the general public?</p>		
<p>1.10 Overall judgement: Directly applicable/Partially applicable/Not applicable</p> <p>There is no need to use section 2 of the checklist if the study is considered 'not applicable'.</p>		
<p>Other comments:</p> <p>.</p>		
<p>Section 2: Study limitations (the level of methodological quality)</p>	<p>Yes/ Partly /No/ Unclear/ NA</p>	<p>Comments</p>

<p><i>This checklist should be used once it has been decided that the study is sufficiently applicable to the context of the clinical guideline⁵.</i></p>		
<p>2.1 Does the model structure adequately reflect the nature of the health condition under evaluation?</p>		
<p>2.2 Is the time horizon sufficiently long to reflect all important</p>		

⁵ The items and notes in this checklist have been developed from guidance in NICE's [Guide to the methods of technology appraisal](#); Evers S, Goossens M, de Vet H et al. (2005) Criteria list for assessment of methodological quality of economic evaluations – CHEC. International Journal of Technology Assessment in Health Care 21:240–5; and Philips Z, Ginnelly L, Sculpher M et al. (2004) Review of guidelines for good practice in decision-analytic modelling in health technology assessment. Health Technology Assessment 8.

differences in costs and outcomes?		
2.3 Are all important and relevant health outcomes included?		
2.4 Are the estimates of baseline health outcomes from the best available source?		
2.5 Are the estimates of relative treatment effects from the best available source?		
2.6 Are all important and relevant costs included?		

<p>2.7 Are the estimates of resource use from the best available source?</p>		
<p>2.8 Are the unit costs of resources from the best available source?</p>		
<p>2.9 Is an appropriate incremental analysis presented or can it be calculated from the data?</p>		
<p>2.10 Are all important parameters whose values are uncertain subjected to appropriate sensitivity analysis?</p>		

2.11 Is there no potential conflict of interest?		
2.12 Overall assessment: Minor limitations/Potentially serious limitations/Very serious limitations		
Other comments: .		

APPENDIX 15: RESEARCH RECOMMENDATIONS

The Guideline Development Group has made the following recommendations for research, based on its review of evidence, to improve NICE guidance and patient care in the future.

1. Preventing postpartum psychosis

What methods can improve the identification of women at high risk of postpartum psychosis and reduce this risk?

Why this is important

Postpartum psychosis is a severe mental illness with a rapid onset and a major impact on the woman and her ability to care for her baby. It is associated with an increased risk of mortality in both the woman and her baby. Prophylactic treatment can be effective for women who are known to be at high risk, but for some women postpartum psychosis may be their first episode of severe mental illness. Better identification of women at high risk and a greater understanding of prophylactic and acute treatment would have a significant impact on maternal and child welfare, and on service costs.

The question should be addressed by a programme of research into the prevention, treatment and management of postpartum psychosis comprising: The development of a tool for routine clinical use to improve the identification of women at high risk of developing postpartum psychosis. This should be tested in a prospective cohort study.

The development of a set of interventions intended to prevent the onset of postpartum psychosis and a method for their effective and efficient delivery.

The testing of the clinical and cost effectiveness of the interventions in a large scale randomised controlled trial.

The development and testing of a programme for the implementation of an effective strategy for preventing and identifying postpartum psychosis.

2. The safety of drugs for bipolar disorder in pregnancy and the postnatal period

How safe are drugs used to treat bipolar disorder in pregnancy and the postnatal period?

Why this is important

Drugs are effective for the acute treatment of bipolar disorder and for preventing relapse. All drugs used to treat mental health problems may carry some risk for the woman, fetus and baby. For some drugs such as sodium valproate these risks are well described, but the data are drawn from epilepsy case registers. For

others such as lithium, the data are very limited. In addition, the prevalence of adverse outcomes for the woman, fetus or baby in untreated bipolar disorder is not well described.

The question should be addressed by establishing a long-term register of women with bipolar disorder to provide data on:

the drugs used for treating bipolar disorder in pregnancy

the following outcomes (by drug type and for women who had no treatment for bipolar disorder in pregnancy):

- maternal outcomes (for example, episodes of mood disorder in pregnancy and the postnatal period, miscarriage, preterm delivery)
- congenital malformations (for example, spinal cord and cardiac malformation)
- baby outcomes (for example, mortality, birth weight)
- childhood outcomes (for example, cognitive development).

3. Psychological interventions focused on the mother-baby relationship

Are interventions designed to improve the quality of the mother-baby relationship in the first year after childbirth effective in women with a diagnosed mental health problem?

Why this is important

Problems in the mother-baby relationship in the first year after childbirth may increase maternal mental health problems and are associated with a range of problems for the baby, including delayed cognitive and emotional development. A number of interventions are effective in improving the interaction between women and their babies, but it is not known if these are effective in women with a diagnosed mental health problem.

The question should be addressed in a randomised controlled trial comparing an intervention (proven to be effective in improving the quality of mother-baby interactions in women without a diagnosed mental health problem) against standard care. The trial should report the following outcomes, with a follow-up period of at least 2 years:

- the mental health of the woman
- the emotional and cognitive development of the baby
- the quality of the interaction.

The trial should also examine the cost effectiveness of the intervention.

4. Structured clinical management for moderate to severe personality disorders in pregnancy and the postnatal period

Is structured clinical management for moderate to severe personality disorders in pregnancy and the postnatal period effective at improving outcomes for women and their babies?

Why this is important

Personality disorders are associated with poor engagement with maternity services and perinatal mental health services and this leads to poor mental and physical health outcomes for the woman, fetus and baby. The complex psychological interventions that are effective for treating personality disorder may present problems for engagement even in those motivated to seek treatment. Structured clinical management is a psychologically-informed model of case management, which is effective for treating personality disorder and may have greater flexibility and capacity to engage women with personality disorder in pregnancy and the postnatal period.

The question should be addressed in a randomised controlled trial comparing structured clinical management of personality disorder in pregnancy and the postnatal period against standard care. The trial should report the following outcomes, with a follow-up period of at least 2 years:

- the mental and physical health of the woman
- the physical health of the fetus
- the mental and physical health of the baby
- the quality of the mother-baby relationship.

The trial should also examine the cost effectiveness of the intervention.

5. Psychological interventions for moderate to severe anxiety disorders in pregnancy

Are psychological interventions effective for treating moderate to severe anxiety disorders (including obsessive-compulsive disorder, panic disorder, post-traumatic stress disorder and social anxiety disorder) in pregnancy?

Why this is important

Anxiety disorders are often not identified or treated in pregnancy. In addition, many women who are taking medication for such problems stop taking it when they are pregnant. The development of effective psychological interventions is therefore important. Although there are effective psychological interventions for anxiety disorders, there is limited evidence about their effectiveness in pregnancy and how these interventions might be adapted for use in pregnant women.

The question should be addressed by a programme of research evaluating psychological interventions (including individual and group approaches) for moderate to severe anxiety disorders in pregnancy, comprising:

A development programme to establish the adaptations to effective interventions (for example, mode of delivery, duration, content, and intensity of treatment) that are needed for use in pregnancy.

The testing of the adapted interventions in a series of pilot studies.

The testing of the clinical and cost effectiveness of the adapted interventions in large scale randomised controlled trials.

The development and testing of a programme for the implementation of psychological interventions for moderate to severe anxiety disorders.

APPENDIX 16: CHANGES MADE TO THE 2007 FULL GUIDELINE

Chapter number in the 2007 guideline	Title of the chapter in the 2007 guideline	Changes made in the 2014 update
1.	Executive Summary	This has been replaced. An Executive Summary will feature in Chapter 9 of the 2014 guideline after stakeholder consultation.
2.	Introduction	This chapter has been replaced by the Preface, see chapter 1 of the 2014 guideline.
3.	Methods used to update this guideline	This chapter has been replaced to reflect the most recent guideline methodology. See chapter 3 of the 2014 guideline. For the 2007 Methods chapter, see Appendix 23.
4.	Antenatal and postnatal mental health: Population, disorders and services	This chapter has been replaced by an introduction to Antenatal and postnatal mental health, see chapter 2 of the 2014 guideline. The recommendations which were in this chapter have been updated and feature in the Experience of Care, chapter 6 of the 2014 guideline.
5.	The prediction and detection of mental illness during pregnancy and the postnatal period	This chapter has been updated and retitled 'Case identification and assessment', see chapter 5 of the 2014 guideline.

6.	Psychological and psychosocial interventions	This chapter has been updated, see chapter 7 of the 2014 guideline.
7.	The pharmacological treatment of mental disorders in pregnant and breastfeeding women	This chapter has been updated, see chapter 8 of the 2014 guideline.
8.	The organisation of perinatal mental health services	<p>The 2007 guideline review of the organisation of perinatal mental health services has not been updated because it was outside the remit for this update. There have been slight amendments to the language used in the recommendations so that they are consistent with the updated recommendations in this guideline, but there have been no significant changes to the context and meaning of the recommendations.</p> <p>In addition, one recommendation (4.6.1.5) that was previously located in the chapter ‘The prediction and detection of mental illness during pregnancy and the postnatal period’ in the 2007 guideline⁶ has been moved to this chapter because it is related to the work of perinatal mental health services, which is the focus of this chapter. The review itself has not been updated.</p> <p>The 2007 review is summarised below (see Appendix 27 for the full 2007 guideline chapter, to provide context for the recommendations that were made in 2007 and that still stand for this guideline). However, it is important to bear in mind that no new evidence has been reviewed or added to this chapter.</p>

⁶ ‘The prediction and detection of mental illness during pregnancy and the postnatal period’ chapter from the 2007 guideline has largely been replaced by chapter 5 (‘Case identification and assessment’) in this guideline.

Appendix 1: Scope for the development of the clinical guideline	This has been replaced.
Appendix 1 a: Referral from the Department of Health and Welsh Assembly Government	This has been deleted
Appendix 2: Advisors to the Guideline Development Group	This has been replaced.
Appendix 3: Stakeholders who responded to early requests for evidence	This has been replaced.
Appendix 4: Stakeholders and experts who submitted comments in response to the consultation draft of the guideline	This has been replaced.
Appendix 5: Clinical questions	This has been replaced.
Appendix 6: Search strategies for the identification of clinical studies	This has been replaced.
Appendix 7: Clinical study eligibility checklist	This has been replaced.
Appendix 8: RCT methodology checklist	This has been replaced.
Appendix 9: Clinical study data extraction forms	This has been replaced.

Appendix 10: RCT data extraction form	This has been deleted
Appendix 11: Formulae for calculating standard deviations	This has been replaced
Appendix 12: Quality checklist for full economic evaluations	This has been replaced
Appendix 13: Data extraction form for economic studies	This has been replaced
Appendix 14: Health economics evidence on mother and baby units	Please see Appendix 24 of the 2014 update
Appendix 15: Survey of antenatal and postnatal mental health primary care services in England and Wales - questionnaire	Please see Appendix 25 of the 2014 update
Appendix 16: Results of survey of antenatal and postnatal mental health primary care services in England and Wales-	Please see Appendix 26 of the 2014 update
Appendix 17: Declarations of interests by GDG members	This has been replaced
Appendix 18: Characteristics of reviewed studies	This has been replaced
Appendix 19: Evidence profiles	This has been replaced

Appendix 20: Clinical evidence forest plots	This has been replaced
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