

# SEARCH STRATEGIES FOR THE IDENTIFICATION OF CLINICAL STUDIES

## Scoping searches

A broad preliminary search of the literature was undertaken in August 2011 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 3.23. 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, focused searches					
Review area/s	Search type	Search construction	Study design searched	Databases searched	Date range searched
Case identification and assessment	Focused search	[(Population terms version two) AND (((general identification instrument/ diagnostic assessment terms ) AND (sensitivity/specificity terms)) OR (named instruments))]	All study types	General medical databases: Embase, Medline, PreMedline, PsycINFO	Database inception to 20 January 2014
Section 2, generic searches					
Review area/s	Search type	Search construction	Study design searched	Databases searched	Date range searched

Pharmacologic and medical interventions for acute episodes	Generic search	General medical databases: [(population terms version 1) AND (RCT/SR terms)] Topic specific databases: [(population terms)]	Qualitative systematic reviews, randomized controlled studies	General medical databases: CINAHL, Embase, Medline, PreMedline, PsycINFO  Topic specific databases: CDSR, CENTRAL, DARE, HMIC, HTA	SR: 2005 to 11 November 2012; RCT: 2005 to 20 January 2014
Pharmacologic and medical interventions for long-term management	Generic search	General medical databases: [(population terms version 1) AND (RCT/SR terms)] Topic specific databases: [(population terms)]	Qualitative systematic reviews, randomized controlled studies	General medical databases: CINAHL, Embase, Medline, PreMedline, PsycINFO  Topic specific databases: CDSR, CENTRAL, DARE, HMIC, HTA	SR: 2005 to 11 November 2012; RCT: 2005 to 20 January 2014
Psychosocial interventions for adults	Generic search	General medical databases: [(population terms version 1) AND (RCT/SR terms)] Topic specific databases: [(population terms)]	Qualitative systematic reviews, randomized controlled studies	General medical databases: CINAHL, Embase, Medline, PreMedline, PsycINFO  Topic specific databases: CDSR, CENTRAL, DARE, HMIC, HTA	SR: 2005 to 11 November 2012; RCT: 2005 to 20 January 2014

Management of physical health	Generic search	General medical databases: [(population terms version 1) AND (RCT/SR terms)] Topic specific databases: [(population terms)]	Qualitative systematic reviews, randomized controlled studies	General medical databases: CINAHL, Embase, Medline, PreMedline, PsycINFO  Topic specific databases: CDSR, CENTRAL, DARE, HMIC, HTA	SR: 2005 to 11 November 2012; RCT: 2005 to 20 January 2014
<i>Note: evidence resulting from generic searches mapped to all review areas</i>					
* CDSR (Cochrane Database of Systematic Reviews), CENTRAL [COCHRANE database of RCTs and other controlled trials), CINAHL, (Cumulative Index to Nursing and Allied Health Literature), DARE (Database of Abstracts of Reviews and Effectiveness), HMIC (Health Management Information Consortium), HTA (Health Technology Assessment database)					

## 1 Population search terms - all databases

### 1.1 STEM - General medical databases

Embase, Medline, PreMEDLINE, PsycINFO - OVID SP

#### Version 1

- 1 exp bipolar disorder/ or mania/
- 2 1 use emez
- 3 exp bipolar disorder/
- 4 3 use mesz, prem
- 5 exp bipolar disorder/ or exp mania/
- 6 5 use psych
- 7 ((bi?polar adj5 (disorder\$ or depress\$)) or ((cyclothymi\$ or rapid or ultradian) adj5 cycl\$) or hypomani\$ or mania\$ or manic\$ or mixed episode\$ or rcbd).ti,ab.
- 8 or/2,4,6-7

#### Version 2

- 1 exp bipolar disorder/ or mania/ or mood disorder/
- 2 1 use emez
- 3 exp bipolar disorder/ or mood disorders/
- 4 3 use mesz, prem
- 5 affective disorders/ or exp bipolar disorder/ or exp mania/
- 6 5 use psych
- 7 (bi?polar or ((cyclothymi\$ or rapid or ultradian) adj5 cycl\$) or hypomani\$ or mania\$ or manic\$ or mixed episode\$ or rcbd).ti,ab,tm.
- 8 ((affective\$ or mood) adj (disorder\$ or disturbance\$ or dysfunction\$ or illness\$ or swing\$)).ti,ab,tm.
- 9 or/2,4,6-8

### 1.2 STEM - topic specific databases

HTA, CDSR, DARE, CENTRAL - Wiley

#### #1 mesh descriptor **bipolar disorder** explode all trees

- ((((bipolar or "bi polar") near/5 (disorder\* or depress\*)) or  
#2 ((cyclothymi\* or rapid or ultradian) near/5 cycl\*) or  
hypomani\* or mania\* or manic\* or "mixed episode\*" or  
rcbd):ti,ab,kw

#### #3 (#1 or #2)

1.3 STEM- topic specific databases  
CINAHL – Ebsco

s3	s1 or s2
s2	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 rcbd) ) 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 rcbd) )
s1	(mh "bipolar disorder")

1.4 STEM- topic specific databases  
HMIC – HDAS

- 1 hmic bipolar disorder/
- 2 hmic (((bipolar or "bi polar") and (disorder\* or depress\*)) or ((cyclothymi\* or rapid or ultradian) and cycl\*) or hypomani\* or mania\* or manic\* or "mixed episode\*" or rcbd).ti,ab
- 3 hmic 1 or 2

**2. Question specific search strategies - all databases**

2.1 Case identification and assessment

Review questions:

RQ: For adults at risk of or suspected as having bipolar disorder, what identification instruments when compared to a gold standard diagnosis (based on DSM or ICD criteria) have adequate clinical utility (i.e. clinically useful with good sensitivity and specificity) and reliability?

RQ: For children (less than 13 years) and young people (13 to 18 years) at risk of or suspected of having bipolar disorder, what identification instruments when compared to a gold standard diagnosis (based on DSM or ICD criteria) have adequate clinical utility (i.e. clinically useful with good sensitivity and specificity) and reliability?

RQ: For people with possible bipolar disorder, what are the key components of, and the most effective structure for, diagnostic assessment?

What amendments, if any, need to be made for (i) particular cultural or minority ethnic groups, (ii) people of different genders, (iii) children and young people, (iv) older adults?

## 2.11 General medical databases

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 measurement/ or needs assessment/ or nursing assessment/ or outcome assessment/ or patient assessment/ or predictive value/ 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
- 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 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 exp psychiatric status rating scales/ or exp psychological tests/ or exp questionnaires/ or risk assessment/
- 4 3 use mesz, prem
- 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 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
- 7 (index or instrument\$ or interview\$ or inventor\$ or item\$ or measure\$1 or 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, prem  
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  
18 (casefind\$ or ((case or tool\$) adj (find\$ or identif\$))).tw.  
19 or/17-18  
20 "area under the curve"/ or predictive validity/ or receiver operating  
characteristic/ or reliability/ or "sensitivity and specificity"/ or test retest  
reliability/ or validity/  
21 20 use emez  
22 "area under curve"/ or "predictive value of tests"/ or "reproducibility of  
results"/ or roc curve/ or "sensitivity and specificity"/ or validation  
studies/  
23 22 use mesz, prem  
24 test reliability/ or test validity/  
25 24 use psych  
26 (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  
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.  
27 or/21,23,25-26  
28 19 and 27  
29 ((altman adj (selfrat\$ or self rat\$) adj mania adj2 scale\$) or arsm).tw.  
30 (bipolar spectrum diagnostic scale\$ or bsds).tw.  
31 ((bipolarity or bi polarity) adj index).tw.  
32 ((child mania rating scale) or cmrs).ti,ab,tm.  
33 (clinician-administered rating scale for mania or carsm or cars m).tw.  
34 ((conner\$ abbreviated adj3 parent\$ adj3 question\$) or CAPQ).ti,ab,tm.  
35 (hypomania checklist or hcl 32 or hcl32 or hcl32r1).tw.  
36 (hypomanic personality adj (questionnaire\$ or scale\$)).tw.  
37 ((screening assessment adj2 (depression adj2 polarity)) or sadp or sad  
p).tw.  
38 ((parent adj4 young mania rating scale) or pymrs or p ymrs).tw.  
39 (composite international diagnostic interview or cidi or cidi1 or cidi2 or  
cidi3 or cidisc).tw.  
40 (general behavior inventory or gbi15 or gbi 15 or pgbi or p gbi).tw.



- 41 life chart.tw.
- 42 ((m3 or m 3) adj (checklist\$ or screen\$)).tw.
- 43 (((miniinternational or mini international) adj neuropsychiatric interview) or mini or miniplus).tw.
- 44 (mood swings questionnaire or msq).tw.
- 45 (mood disorder questionnaire or mdq).tw.
- 46 (provisional diagnostic instrument or pdi4 or pdi 4).tw.
- 47 or/29-46
- 48 or/28,47

### 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 psyh  
(exp bibliographic database/ or (((electronic or computer\$ or online) adj database\$) or bids or cochrane or embase or index medicus or isi citation or
- 7 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 database\$) or bids or cochrane or embase or index medicus or isi citation or
- 9 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 database\$) or bids or cochrane or embase or index medicus or isi citation or
- 11 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 psyh

- 13 ((analy\$ or assessment\$ or evidence\$ or methodol\$ or quantitativ\$ or 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 Qualitative 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 Randomised controlled trial filters

#### 3.21 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)

#### 3.23 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+")