

## APPENDIX 10: SEARCH STRATEGIES FOR THE IDENTIFICATION OF HEALTH ECONOMIC EVIDENCE

Each search was constructed using the groups of terms set out in the table below. The full set of search terms is documented in Sections 1 to 3.1.1. The selection of search terms was kept broad to maximise retrieval of evidence in a wide range of areas of interest to the GDG.

### Summary of systematic search strategies: search strategy construction

Summary of systematic search strategies for health economic evidence					
Section 1					
Review area/s	Search type	Search construction	Study design searched	Databases searched	Date range searched
All review areas/ RQs	Generic, evidence mapped to all review areas	General medical databases – generic search: [(population terms – version 1) AND (HE/QoL filter)]  Topic specific databases – generic search: (population search terms only – version 1)	Economic evidence (including full and partial economic evaluations) and HTA reports	General medical databases: Embase, MEDLINE, MEDLINE In-Process, PsycINFO  Topic specific databases: EconLit, HTA, NHS EED	1995 to May 2012
<i>Note:</i> Evidence resulting from generic searches mapped to all review areas.					
Section 2					
Review area/s	Search type	Search construction	Study design searched	Databases searched	Date range searched
At risk / treatment: RQ A1, RQ B1	Focused, supplements evidence retrieved from generic searches (indicated in Section 1)	General medical databases – focused search: [(population terms – version 2) AND (at risk terms) AND (HE/QoL filter)]  Topic specific databases – focused search: [(population terms – version 2) AND (at risk terms)]	Economic evidence (including full and partial economic evaluations) and HTA reports	General medical databases: Embase, MEDLINE, MEDLINE In-Process, PsycINFO  Topic specific databases: EconLit, HTA, NHS EED	1995 to May 2012
<i>Note.</i> Supplements health economic evidence captured by generic searches indicated in Section 1.					

## 1 Population search terms - all databases

### 1.1 Version 1

#### 1.1.1 STEM - General medical databases

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

1	exp psychosis/ or thought disorder/
2	1 use emez
3	delusions/ or hallucinations/ or exp "schizophrenia and disorders with psychotic features"/ or schizophrenia, childhood/
4	3 use mesz, prem
5	auditory hallucinations/ or delusions/ or hallucinations/ or hypnagogic hallucinations/ or paranoia/ or exp psychosis/ or schizoaffective disorder/ or thought disturbances/ or visual hallucinations/
6	5 use psych
7	(delusion\$ or hallucinat\$ or hebephreni\$ or oligophreni\$ or paranoi\$ or psychotic\$ or psychosis or psychoses or schizo\$).ti,ab.
8	or/2,4,6-7
9	exp adolescence/ or exp adolescent/ or adolescent development/ or exp child/ or child development/ or exp childhood/ or disabled student/ or elementary student/ or high school student/ or high school/ or kindergarten/ or middle school student/ or middle school/ or exp newborn/ or nursery school/ or primary school/ or exp puberty disorders/ or school/ or student/
10	9 use emez
11	exp adolescent/ or adolescent development/ or exp child/ or exp child development/ or exp infant/ or minors/ or puberty/ or puberty, delayed/ or puberty, precocious/ or students/ or exp schools/
12	11 use mesz, prem
13	limit 8 to ((childhood or adolescence <13 to 17 years>) and (100 childhood or 120 neonatal or 140 infancy or 160 preschool age or 180 school age or 200 adolescence))
14	adolescent development/ or boarding schools/ or charter schools/ or exp child development/ or classmates/ or elementary schools/ or exp elementary school students/ or graduate schools/ or high school students/ or high schools/ or institutional schools/ or junior high school students/ or junior high schools/ or kindergarten students/ or kindergartens/ or middle schools/ or nongraded schools/ or nursery schools/ or exp preschool students/ or puberty/ or schools/ or special education students/ or students/ or vocational school students/
15	13 use psych
16	14 use psych
17	or/15-16
18	(adolescen\$ or child\$ or infan\$ or juvenile\$ or teen\$).hw,id.
19	(adolescen\$ or baby or babies or boy\$1 or child\$ or delinquen\$ or girl\$1 or graders or infant\$ or junior\$1 or juvenile\$ or kindergarten or minors or neonate\$ or newborn\$ or new born\$ or p?ediatric\$ or postpubert\$ or postpubescen\$ or prepubert\$ or prepubescen\$ or preschool\$ or preteen\$ or pubertal or puberty or puberties or pubescen\$ or school\$ or student\$ or teen\$ or toddler\$ or (young\$ adj2 (inpatient\$ or patient\$ or people\$ or person\$ or population\$)) or youngster\$ or youth\$1).tw.
20	or/10,12,17-19
21	8 and 20

1.1.2 STEM - topic specific databases  
HTA, NHS EED – Wiley

#1	mesh descriptor <b>delusions</b> , this term only
#2	mesh descriptor <b>hallucinations</b> , this term only
#3	mesh descriptor <b>schizophrenia and disorders with psychotic features</b> explode all trees
#4	mesh descriptor <b>schizophrenia, childhood</b> , this term only
#5	(delusion* or hallucinat* or hebephreni* or oligophreni* or paranoi* or psychotic* or psychosis or psychoses or schizo*):ti or (delusion* or hallucinat* or hebephreni* or oligophreni* or paranoi* or psychotic* or psychosis or psychoses or schizo*):ab
#6	(#1 or #2 or #3 or #4 or #5)
#7	mesh descriptor <b>adolescent</b> , this term only
#8	mesh descriptor <b>child</b> explode all trees
#9	mesh descriptor <b>infant</b> explode all trees
#10	mesh descriptor <b>adolescent development</b> , this term only
#11	mesh descriptor <b>child development</b> explode all trees
#12	mesh descriptor <b>minors</b> , this term only
#13	mesh descriptor <b>puberty, delayed</b> , this term only
#14	mesh descriptor <b>puberty, precocious</b> , this term only
#15	mesh descriptor <b>students</b> , this term only
#16	mesh descriptor <b>schools</b> , this term only
#17	mesh descriptor <b>puberty</b> , this term only all trees
#18	(adolescen* or child* or infan* or juvenile* or teen*):kw or (adolescen* or baby or babies or boy* or child* or delinquen* or girl* or graders or infant* or junior* or juvenile* or kindergarten or minors or neonate* or newborn* or new born* or pediatric* or paediatric* or postpubert* or postpubescen* or prepubert* or prepubescen* or preschool* or preteen* or pubertal or puberty or puberties or pubescen* or school* or student* or teen* or toddler* or (young* near/2 (inpatient* or patient* or people or person* or population)) or youngster* or youth*):ti or (adolescen* or baby or babies or boy* or child* or delinquen* or girl* or graders or infant* or junior* or juvenile* or kindergarten or minors or neonate* or newborn* or new born* or pediatric* or paediatric* or postpubert* or postpubescen* or prepubert* or prepubescen* or preschool* or preteen* or pubertal or puberty or puberties or pubescen* or school* or student* or teen* or toddler* or (young* near/2 (inpatient* or patient* or people or person* or population)) or youngster* or youth*):ab
#19	(#7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18)
#20	(#6 and #19)

1.1.3 STEM - topic specific databases  
EconLit – Ovid SP

1	(delusion\$ or hallucinat\$ or hebephreni\$ or oligophreni\$ or paranoi\$ or psychotic\$ or psychosis or psychoses or schizo\$).tw,hw,kw.
2	(adolescen\$ or child\$ or infan\$ or juvenile\$ or teen\$).hw,kw.
3	(adolescen\$ or baby or babies or boy\$1 or child\$ or delinquen\$ or girl\$1 or graders or infant\$ or junior\$1 or juvenile\$ or kindergarten or minors or neonate\$ or newborn\$ or new born\$ or p?ediatric\$ or postpubert\$ or postpubescen\$ or prepubert\$ or prepubescen\$ or preschool\$ or preteen\$ or pubertal or puberty or puberties or pubescen\$ or school\$ or student\$ or teen\$ or toddler\$ or (young\$ adj2 (inpatient\$ or patient\$ or people\$ or person\$ or population\$)) or youngster\$ or youth\$1).tw.
4	1 and or/2-3

## 1.2 Version 2

### 1.2.1 STEM – General medical databases

Embase, MEDLINE, MEDLINE In-Process, PsycINFO – Ovid SP

*Search request #8 from 1.1.1*

### 1.2.2 STEM - topic specific databases

HTA, NHS EED – Wiley

*Search request #6 from 1.1.2*

### 1.2.3 STEM - topic specific databases

EconLit – Ovid SP

*Search request #1 from 1.1.3*

## 2. Question specific search strategies - all databases

### 2.1 High-risk groups

RQ A1: In children and young people, what are the specific behaviours and symptoms that are associated with an increased risk of developing psychosis and schizophrenia (at risk mental state)?

Sub-questions:

- a) What is the course of these behaviours and symptoms?
- b) What are the specific behaviours and symptoms that prompt initial recognition of psychosis or prompt diagnosis of schizophrenia?

RQ B1: For children and young people who are at risk of developing psychosis and schizophrenia (at risk mental state), does the provision of pharmacological, psychological or psychosocial and/or dietary interventions improve outcomes?

#### 2.1.1 Embase, MEDLINE, MEDLINE In-Process, PsycINFO – Ovid SP

1	high risk patient/ or high risk population/ or ultra high risk criterion/ or ultra high risk population/
2	1 use emez
3	*risk factors/
4	3 use mesz
5	at risk populations/
6	5 use psyh
7	or/2,4,6
8	(symptom\$ or symptomology).sh. or (prodrom\$ or risk\$).hw.
9	(blips or brief limited intermittent psychotic symptom\$ or ((attenuat\$ or early or premonitory or pre monitory) adj2 (sign\$ or symptom\$)) or predelusion\$ or prehallucin\$ or prepsychos\$ or prepsychotic\$ or preschizo\$ or (pre adj (delusion\$ or hallucin\$ or psychos\$ or psychotic\$ or schizo\$)) or prodrom\$ or subclinical\$ or sub\$ clinical\$ or subthreshold\$ or sub\$ threshold\$ or at risk\$ or ((high\$ or incipient or increas\$) adj3 risk\$)).ti,ab.
10	or/8-9
11	(conversion\$ or ((develop\$ or progress\$) adj2 (psychos\$ or psychotic\$ or schiz\$)) or first episode\$ or fullthreshold\$ or full threshold\$ or onset\$ or progression or transition\$ or transitory).ti,ab.
12	10 and 11
13	ultra high risk.ti,ab.

14	((at risk or ((high or increase\$) adj2 risk) or blips or brief limited intermittent psychotic symptom\$ or ((attenuat\$ or early or premonitory) adj2 (sign\$ or symptom\$)) or prodrom\$ or subclinical\$ or sub\$ clinical\$ or subthreshold or sub\$ threshold) and (psychos\$ or psychotic\$ or schiz\$)).ti. or ((at risk or ((high or increase\$) adj2 risk) or blips or brief limited intermittent psychotic symptom\$ or ((attenuat\$ or early or premonitory) adj2 (sign\$ or symptom\$)) or prodrom\$ or subclinical\$ or sub\$ clinical\$ or subthreshold or sub\$ threshold) adj3 (psychos\$ or psychotic\$ or schiz\$)).ab.
15	or/7,12-14

## 2.1.2 HTA, NHS EED - Wiley

#1	high risk patient/ or high risk population/ or ultra high risk criterion/ or ultra high risk population/
#2	mesh descriptor paranoid disorders, this term only
#3	mesh descriptor psychotic disorders explode all trees
#4	mesh descriptor schizophrenia, childhood, this term only
#5	mesh descriptor schizophrenia explode all trees
#6	("delusional disorder*" or hebephreni* or psychosis or psychoses or psychotic* or schizo*):ti or ("delusional disorder*" or hebephreni* or psychosis or psychoses or psychotic* or schizo*):ab
#7	((((chronic* or serious or persistent or severe*) near/1 (mental* or psychological*) near/1 (disorder* or ill*)):ti or (((chronic* or serious or persistent or severe*) near/1 (mental* or psychological*) near/1 (disorder* or ill*)):ab or (((chronic* or serious or persistent or severe*) near/1 (mental* or psychological*) near/1 (disorder* or ill*)):kw
#8	#1 or #2 or #3 or #4 or #5 or #6 or #7
#9	mesh descriptor risk factors, this term only
#10	(prodrom* or symptom* or risk*):kw
#11	(blips or "brief limited intermittent psychotic symptom*" or ((attenuat* or early or premonitory or "pre monitory") near/2 (sign* or symptom*)) or predelusion* or prehallucin* or prepsychos* or prepsychotic* or preschizo* or (pre near/1 (delusion* or hallucin* or psychos* or psychotic* or schizo*)) or prodrom* or subclinical* or "sub clinical*" or subthreshold* or "sub* threshold*" or "at risk*" or ((high* or incipient or increas*) near/3 risk*))
#12	#10 or #11
#13	(conversion* or ((develop* or progress*) near/2 (psychos* or psychotic* or schiz*)) or "first episode*" or fullthreshold* or "full threshold*" or onset* or progression or transition* or transitory)
#14	#12 and #13
#15	"ultra high risk"
#16	((("at risk" or ((high or increase*) near/2 risk) or blips or "brief limited intermittent psychotic symptom*" or ((attenuat* or early or premonitory) near/2 (sign* or symptom*)) or prodrom* or subclinical* or "sub clinical*" or subthreshold or "sub* threshold") and (psychos* or psychotic* or schiz*)):ti. or ((("at risk" or ((high or increase*) near/2 risk) or blips or "brief limited intermittent psychotic symptom*" or ((attenuat* or early or premonitory) near/2 (sign* or symptom*)) or prodrom* or subclinical* or "sub clinical*" or subthreshold or "sub* threshold") near/3 (psychos* or psychotic* or schiz*)):ab.
#17	#8 and (#9 or #14 or #15 or #16)

### 2.1.3 EconLit – Ovid SP

1	(prodrom\$ or risk\$ or symptom\$).kw,hw.
2	(blips or brief limited intermittent psychotic symptom\$ or ((attenuat\$ or early or premonitory or pre monitory) adj2 (sign\$ or symptom\$)) or predelusion\$ or prehallucin\$ or prepsychos\$ or prepsychotic\$ or preschizo\$ or (pre adj (delusion\$ or hallucin\$ or psychos\$ or psychotic\$ or schizo\$)) or prodrom\$ or subclinical\$ or sub\$ clinical\$ or subthreshold\$ or sub\$ threshold\$ or at risk\$ or ((high\$ or incipient or increas\$) adj3 risk\$)).ti,ab.
3	or/1-2
4	(conversion\$ or ((develop\$ or progress\$) adj2 (psychos\$ or psychotic\$ or schiz\$)) or first episode\$ or fullthreshold\$ or full threshold\$ or onset\$ or progression or transition\$ or transitory).ti,ab.
5	3 and 4
6	ultra high risk.ti,ab.
7	((at risk or ((high or increase\$) adj2 risk) or blips or brief limited intermittent psychotic symptom\$ or ((attenuat\$ or early or premonitory) adj2 (sign\$ or symptom\$)) or prodrom\$ or subclinical\$ or sub\$ clinical\$ or subthreshold or sub\$ threshold) and (psychos\$ or psychotic\$ or schiz\$)).ti. or ((at risk or ((high or increase\$) adj2 risk) or blips or brief limited intermittent psychotic symptom\$ or ((attenuat\$ or early or premonitory) adj2 (sign\$ or symptom\$)) or prodrom\$ or subclinical\$ or sub\$ clinical\$ or subthreshold or sub\$ threshold) adj3 (psychos\$ or psychotic\$ or schiz\$)).ab.
8	or/5-7

## 3 Study design filters - all databases

### 3.1 Health economic study design filter

#### 3.1.1 Health economic and quality of life study design filter

Embase, MEDLINE, MEDLINE In-Process, 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
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 psyh
7	(budget\$ or cost\$ or econom\$ or expenditure\$ or fee or fees or financ\$ or fund or funds or funding\$ or funded or (expenditure\$ not energy) or pharmacoeconomic\$ or price or prices or pricing or ration or rations or rationing\$ or rationed or resource\$ allocat\$ or saving 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
12	exp decision theory/ or exp stochastic modeling/
13	12 use psyh

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
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 or value\$) adj3 (life or survival or well\$)).ti,ab.
29	(qol or hql\$ or hqol\$ or h qol\$ or hrqol or hr qol or hr ql or hrql).ti,ab.
30	rosser.ti,ab.
31	sickness impact profile.ti,ab.
32	(standard gamble or time trade\$ or tto or willingness to pay).ti,ab.
33	(sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirty six or short form thirtysix or short form thirty six).ti,ab.
34	(sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).ti,ab.
35	(sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).ti,ab.
36	(sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).ti,ab.
37	(sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).ti,ab.
38	or/ 2,4,6-7,9,11,13-14,16,18,20-37