1

Appendix C: Search strategies

2

Overview of search strategies

3
4
5 This appendix details the search strategies used in the identification of relevant studies for the
6 guideline on diagnosis, prevention and management of delirium.
7
8 All searches were conducted on the following databases: Medline (OVID), Embase (OVID),
9 PsycINFO (Silverplatter/OVID) Cinahl (EBSCO) and the Cochrane Library.
10
11 Searches were initially performed for articles published since 1994, the publication date of
12 the *Diagnostic and Statistical Manual IV* (DSM IV) which is the reference standard for the
13 diagnosis of delirium. Following guidance from the Guideline Development Group (GDG), a
14 further search back to 1987 was carried out in order to retrieve studies using the earlier
15 *Diagnostic and Statistical Manual III (Revised)* (DSMIII-R) as the reference standard.
16
17 Search filters were applied where appropriate, including filters for randomised controlled
18 trials (RCT) and systematic reviews (SR). The RCT filter used was based on that recommended
19 by Cochrane (Higgins 2005). An exclusions filter was designed to remove irrelevant results such
20 as letters and editorials.
21
22 The search strategies for each review are reproduced below. Note that the searches make use
23 of the controlled vocabulary which varies between databases and between search interfaces.
24 Amendments were made where necessary in order to take these variations into account.
25
26 Where possible, searches were restricted to articles written in English. All searches were
27 updated on August 17th 2009.
28
29 Hand searching was not undertaken by the NCC-NSC following NICE advice that exhaustive
30 searching on every guideline review topic is not practical (Mason 2002). Reference lists of
31 articles were checked for further articles of potential relevance.
32

33

1 Clinical questions and literature search

Question wording	Study type / filters used	Database and years
Diagnosis		
What are the symptoms that indicate a person may have delirium?	All study types	Medline 1994–2009 Embase 1994–2009 Cochrane 1994–2009 Cinahl 1994–2009 PsycINFO 1994–2009
What is the diagnostic accuracy of practical diagnostic tests compared with the reference standard DSM IV, to identify delirium in people in hospital and long-term care settings?		
What are the diagnostic criteria that must be fulfilled to identify that a person has delirium?		
Prognosis		
What are the risk factors for delirium?	All study types	Medline 1987–2009 Embase 1987–2009 Cochrane 1987–2009 Cinahl 1987–2009 PsycINFO 1987–2009
What are the precipitating factors for delirium?		
What are the consequences of delirium in terms of morbidity and mortality in a person in hospital or long-term care ?		
Interventions		
Prevention of delirium in a hospital setting		
What are the most clinical and cost effective and safe pharmacological interventions for the prevention of delirium in people in hospital?	All study types	Medline 1994–2009 Embase 1994–2009 Cochrane 1994–2009 Cinahl 1994–2009 PsycINFO 1994–2009
What are the most clinical and cost effective single-component, non-pharmacological interventions for the prevention of delirium in people in hospital?		
What are the most clinical and cost effective multicomponent interventions for the prevention of delirium in people in hospital?		
Prevention of delirium in a long-term care setting		
What are the most clinical and cost effective and safe pharmacological interventions for the prevention of delirium in people in long-term care?	All study types	Medline 1994–2009 Embase 1994–2009 Cochrane 1994–2009 Cinahl 1994–2009 PsycINFO 1994–2009
What are the most clinical and cost effective single-component, non-pharmacological interventions for the prevention of delirium in people in long-term care?		
What are the most clinical and cost effective multicomponent interventions for the prevention of delirium in people in long-term care?		
Treatment of delirium in a hospital setting		
What are the most clinical and cost effective and safe pharmacological interventions for treating people with delirium in hospital?	All study types	Medline 1994–2009 Embase 1994–2009 Cochrane 1994–2009 Cinahl 1994–2009 PsycINFO 1994–2009
What are the most clinical and cost effective single-component, non-pharmacological interventions for treating people with delirium in hospital?		
What are the most clinical and cost effective multicomponent interventions for treating people with delirium in hospital?		

2

1

Question wording	Study type / filters used	Database and years
Treatment of delirium in a long-term care setting		
What are the most clinical and cost effective and safe pharmacological interventions for treating people with delirium in long-term care?	All study types	Medline 1994–2009 Embase 1994–2009 Cochrane 1994–2009 Cinahl 1994–2009 PsycINFO 1994–2009
What are the most clinical and cost effective single-component, non-pharmacological interventions for treating people with delirium in long-term care?		
What are the most clinical and cost effective multicomponent interventions for treating people with delirium in long-term care?		
Patient information		
What information should be given to people at risk of developing delirium, or people with delirium, and their families or carers?	All study types	Medline 1994–2009 Embase 1994–2009 Cochrane 1994–2009 Cinahl 1994–2009 PsycINFO 1994–2009
Other		
What is the prevalence of delirium in different hospital settings and in long-term care?	All study types	Medline 1994–2009 Embase 1994–2009 Cochrane 1994–2009 Cinahl 1994–2009 PsycINFO 1994–2009

2

Search terms

Delirium Patient Filter

The following patient filters were developed in consultation with the GDG chair. These patient filters were initially combined with filters for randomized controlled trials (RCTs) and systematic reviews (SRs) (see below). It was then combined with an exclusions filter to remove unwanted references. The results were sifted for relevant studies.

The searches were then performed with no additional filters and again sifted for studies relevant to the guideline.

Medline

No.	Search terms
1	deliri$.ti,ab.
2	(acute adj2 (confusion$ or "brain syndrome" or "brain failure" or "psycho-organic syndrome" or "organic psychosyndrome")).mp.
3	(terminal$ adj restless$).mp.
4	toxic confus$.mp.
5	delirium/
6	confusion/
7	or/1-6
8	*psychoses, alcoholic/ or *alcohol withdrawal delirium/
9	*substance withdrawal syndrome/
10	8 or 9
11	7 not 10

Embase

No.	Search terms
1	delirium/
2	(acute adj2 (confusion$ or "brain syndrome" or "brain failure" or "psycho-organic syndrome" or "organic psychosyndrome")).mp.
3	deliri$.ti,ab.
4	(terminal$ adj restless$).mp.
5	toxic confus$.mp.
6	or/1-5
7	*alcohol psychosis/
8	*delirium tremens/
9	*withdrawal syndrome/
10	7 or 8 or 9
11	6 not 10

PsycINFO (Silverplatter)

No.	Search terms
#12	#6 not #11
#11	("delirium-tremens" in mj) or ("alcoholic-psychosis" in mj) or ("alcohol-withdrawal" in mj) or ("drug-withdrawal" in mj)
#10	"delirium-tremens" in mj
#9	"alcoholic-psychosis" in mj
#8	"alcohol-withdrawal" in mj
#7	"drug-withdrawal" in mj
#6	(toxic confus* in ti,ab,mj,mn) or ((terminal* adj restless*) in ti,ab,mn,mj) or ((acute near2 (confusion* or "brain syndrome" or "brain failure" or "psycho-organic syndrome" or "organic psychosyndrome")) in ti,ab,mj,mn) or (deliri* in ti,ab) or ("delirium-" in mj,mn)
#5	toxic confus* in ti,ab,mj,mn
#4	(terminal* adj restless*) in ti,ab,mn,mj
#3	(acute near2 (confusion* or "brain syndrome" or "brain failure" or "psycho-organic syndrome" or "organic psychosyndrome")) in ti,ab,mj,mn
#2	deliri* in ti,ab
#1	"delirium-" in mj,mn

1

PsycINFO (OVID)

No.	Search terms
1	exp delirium/
2	deliri$.ti,ab.
3	(acute adj2 (confusion* or "brain syndrome" or "brain failure" or "psycho-organic syndrome" or "organic psychosyndrome")).ti,ab,sh.
4	(terminal* adj restless*).ti,ab,sh.
5	toxic confus*.ti,ab,sh.
6	or/1-5
7	*drug withdrawal/
8	*alcohol withdrawal/
9	*alcoholic psychosis/
10	*delirium tremens/
11	or/7-10
12	6 not 11

3

Cinahl

No.	Search terms
S17	s12 not s16
S16	s15 or s14 or s13
S15	(mh "psychoses, substance-induced+")
S14	(mh "alcohol withdrawal delirium")
S13	(mh "substance withdrawal syndrome")
S12	s11 or s10 or s9 or s8 or s7 or s6 or s5 or s4 or s3 or s2 or s1
S11	toxic n1 confus*
S10	terminal* n1 restless*
S9	acute n2 "organic psycho?syndrome"
S8	acute n2 "psycho-organic syndrome"
S7	acute n2 "brain failure"
S6	acute n2 "brain syndrome"
S5	acute n2 confusion*
S4	deliri*
S3	(mh "delirium management (iowa nic)")
S2	(mh "confusion")
S1	(mh "delirium")

5

The Cochrane Library

No.	Search terms
#1	deliri*:kw,ti,ab
#2	(acute near/2 (confusion* or brain syndrome or brain failure or psycho*organic syndrome* or organic psycho*syndrome*)):kw,ti,ab
#3	(terminal* next restless*):kw,ti,ab
#4	toxic next confus*:kw,ti,ab
#5	(#1 OR #2 OR #3 OR #4)

7

1

RCT Filters

3

Medline

No.	Search terms
1	randomized controlled trial$.pt,sh.
2	clinical trial$.pt,sh.
3	random allocation/
4	double blind method/
5	single blind method/
6	((clin$ or control$) adj5 trial$).ti,ab.
7	((singl$ or doubl$ or trebl$ or tripl$) adj25 (blind$ or mask$)).ti,ab.
8	placebos/
9	placebo$.ti,ab.
10	random$.ti,ab.
11	(volunteer$ or "control group" or controls or prospective$).ti,ab.
12	research design/
13	or/1-12
14	animals/ not humans/
15	13 not 14

5

Embase

No.	Search terms
1	exp randomized controlled trial/
2	(random$ or placebo$).ti,ab.
3	((singl$ or doubl$ or trebl$ or tripl$) adj25 (blind$ or mask$)).ti,ab.
4	(clin$ adj25 trial$).ti,ab.
5	exp comparative study/
6	exp evaluation/
7	exp follow up/
8	exp prospective study/
9	(control$ or prospective$ or volunteer$).ti,ab.
10	or/1-9
11	exp human/
12	10 and 11

7

PsycINFO

No.	Search terms
1	placebo.sh.
2	clinical trials.sh.
3	random sampling.sh.
4	mental health program evaluation.sh.
5	treatment effectiveness evaluation.sh.
6	exp treatment outcomes/ or treatment outcome$.md.
7	(clinical adj2 trial$).tw.
8	(crossover or cross over).tw.
9	(((single$ or doubl$ or trebl$ or tripl$) adj5 (blind$ or mask$ or dummy)) or (singleblind$ or doubleblind$ or trebleblind$)).tw.

10	(placebo$ or random$).tw.
11	(animal not (animal and human)).po. or (animals not (animals and (human females or human males))).sh.
12	or/1-10 not 11

1
2

3 Cinahl

No.	Search terms
S11	(s10 or s9 or s8 or s7 or s6 or s5 or s4 or s3 or s2 or s1)
S10	control* or prospective* or volunteer*
S9	(mh "quantitative studies")
S8	(mh "placebos")
S7	(mh "random assignment")
S6	random* or placebo*
S5	(singl* n25 mask*) or (doubl* n25 mask*) or (trebl* n25 mask*) or (tripl* n25 mask*)
S4	(singl* n25 blind*) or (doubl* n25 blind*) or (trebl* n25 blind*) or (tripl* n25 blind*)
S3	(clin* n25 trial*)
S2	pt clinical trial
S1	(mh "clinical trials+")

4 SR Filters

5

6 Medline / Embase

No.	Search terms
1	review.pt. or review.ti. or "review"/
2	(systematic$ or evidence$ or methodol$ or quantitativ$ or analys$ or assessment$).ti,sh,ab.
3	1 and 2
4	meta-analysis.pt.
5	meta-analysis/
6	meta-analysis as topic/
7	"systematic review"/
8	(meta-analy$ or metanaly$ or metaanaly$ or meta analy$).ti,ab.
9	((systematic$ or evidence$ or methodol$ or quantitativ$) adj5 (review$ or survey$ or overview$)).ti,ab,sh.
10	((pool$ or combined or combining) adj2 (data or trials or studies or results)).ti,ab.
11	or/3-10

7

8 PsycINFO

No.	Search terms
1	(meta analysis or systematic review).sh,md.
2	literature review.sh,md.
3	(metaanal$ or meta anal$ or metasynthes$ or meta synthes$).tw.
4	((systematic or quantitative or methodologic$) adj5 (overview$ or review$)).tw.
5	((quantitativ$ or data) adj (extraction or synthesis)).tw.
6	((bids or cinahl or cochrane or embase or index medicus or isi citation or medlars or psyclit or psychlit or scisearch or science citation or (web adj2 science)) and review$).tw.

7	(pooled or pooling).tw.
8	(research adj (review$ or integration)).tw.
9	(handsearch$ or ((hand or manual) adj search$)).tw.
10	((electronic or bibliographic) adj database$).tw.
11	(mantel haenszel or peto or dersimonian or der simonian).ti,ab.
12	(fixed effect$ or random effect$).ti,ab.
13	reference list$.ab.
14	bibliograph$.ab.
15	published studies.ab.
16	relevant journals.ab.
17	selection criteria.ab.
18	or/1-17

Cinahl

No.	Search terms
S13	S12 or S11 or S10 or S9 or S8 or S7 or S6
S12	(pool* N2 data) or (combined N2 data) or (combining N2 data) or (pool* N2 trials) or (combined N2 trials) or (combining N2 trials) or (pool* N2 studies) or (combined N2 studies) or (combining N2 studies) or (pool* N2 results) or (combined N2 results) or (combining N2 results)
S11	(systematic* N5 overview*) or (evidence* N5 overview*) or (methodol* N5 overview*) or (quantitativ* N5 overview*)
S10	(systematic* N5 survey*) or (evidence* N5 survey*) or (methodol* N5 survey*) or (quantitativ* N5 survey*)
S9	(systematic* N5 review*) or (evidence* N5 review*) or (methodol* N5 review*) or (quantitativ* N5 review*)
S8	(meta-analy* or metanaly* or metaanaly* or meta analy*)
S7	(MH "Meta Analysis")
S6	S4 and S5
S5	S3 or S2 or S1
S4	(systematic* or evidence* or methodol* or quantitativ* or analys* or assessment*)
S3	TI review
S2	(MH "Systematic Review")
S1	PT review

Exclusions Filter

The following filter was designed to remove irrelevant results from searches. If used it was combined into search strategies using the NOT operator.

Medline / Embase / Cinahl

No.	Search terms
1	letter.pt.
2	letter/
3	letter$/
4	editorial.pt.
5	historical article.pt.

6 anecdote.pt.
7 commentary.pt.
8 note.pt.
9 case report/
10 case report$.pt.
11 case study/
12 case study.pt.
13 exp animal/ not human/
14 nonhuman/
15 exp animal studies/
16 animals, laboratory/
17 exp experimental animal/
18 exp animal experiment/
19 exp animal model/
20 exp rodentia/
21 exp rodents/
22 exp rodent/
23 or/1-22

1
2

Adverse Effects

The following searches were combined with the delirium patient filter to identify studies reporting pharmacological adverse effects.

Medline

No.	Search terms
1	haloperidol/ae, to
2	risperidone/ae, to
3	diazepam/ae, to
4	flunitrazepam/ae, to
5	meperidine/ae, to
6	or/1-5
7	(donepezil$ or aricept or rivastigmine or amisulpride or sultopride or olanzapine or quetiapine or valium or rohypnol or rohipnol or pethidine).mp.
8	(ae or to).fs.
9	7 and 8
10	6 or 9

Embase

No.	Search terms
1	haloperidol/ae, to
2	donepezil/ae, to
3	rivastigmine/ae, to
4	exp amisulpride/ae, to
5	olanzapine/ae, to
6	quetiapine/ae, to
7	risperidone/ae, to
8	diazepam/ae, to
9	flunitrazepam/ae, to
10	pethidine/ae, to
11	or/1-10

PsycINFO

No.	Search terms
1	"side effects".id.

Cinahl

No.	Search terms
S3	S1 AND S2

No.	Search terms
S2	(haloperidol or risperidone or diazepam or flunitrazepam or meperidine or donepezil* or aricept or rivastigmine or amisulpride or sultopride or olanzapine or quetiapine or valium or rohypnol or rohipnol or pethidine)
S1	MW "adverse effects"

The Cochrane Library

No.	Search terms
#1	(haloperidol or risperidone or diazepam or flunitrazepam or meperidine or donepezil* or aricept or rivastigmine or amisulpride or sultopride or olanzapine or quetiapine or valium or rohypnol or rohipnol or pethidine):ti,ab,kw

Patient Information

The following searches were combined with the delirium patient filter and the exclusions filter to identify papers for the review on information for patients.

Medline

No.	Search terms
1	((client$ or patient$ or user$ or carer$ or consumer$ or customer$) adj3 (attitud$ or priorit$ or perception$ or preferen$ or expectation$ or choice$ or perspective$ or view$ or satisfact$ or inform$ or experience$ or opinion$)).mp.
2	(information adj need$).mp.
3	(information adj requirement$).mp.
4	(information adj support$).mp.
5	(patient$ adj information$).mp.
6	(service$ adj2 acceptab$).mp.
7	(service$ adj2 unacceptab$).mp.
8	psycho?social.mp.
9	(patient$ adj (complian$ or adheren$ or concordan$)).mp.
10	patient education/
11	exp attitude to health/
12	exp patient acceptance of health care/
13	or/1-12

Embase

No.	Search terms
1	((client$ or patient$ or user$ or carer$ or consumer$ or customer$) adj3 (attitud$ or priorit$ or perception$ or preferen$ or expectation$ or choice$ or perspective$ or view$ or satisfact$ or inform$ or experience$ or opinion$)).mp.
2	(information adj need$).mp.
3	(information adj requirement$).mp.
4	(information adj support$).mp.
5	(patient$ adj information$).mp.

No.	Search terms
6	(service$ adj2 acceptab$).mp.
7	(service$ adj2 unacceptab$).mp.
8	psycho?social.mp.
9	(patient$ adj (complian$ or adheren$ or concordan$)).mp.
10	patient education/
11	exp attitude/
12	exp patient attitude/
13	or/1-12

PsycINFO

No.	Search terms
1	((client$ or patient$ or user$ or carer$ or consumer$ or customer$) adj3 (attitud$ or priorit$ or perception$ or preferen$ or expectation$ or choice$ or perspective$ or view$ or satisfact$ or inform$ or experience$ or opinion$)).mp.
2	(information adj need$).mp.
3	(information adj requirement$).mp.
4	(information adj support$).mp.
5	(patient$ adj information$).mp.
6	(service$ adj2 acceptab$).mp.
7	(service$ adj2 unacceptab$).mp.
8	psycho?social.mp.
9	(patient$ adj (complian$ or adheren$ or concordan$)).mp.
10	client education/
11	exp client attitudes/ or exp consumer attitudes/ or exp health attitudes/
12	health care delivery/
13	or/1-12

Cinahl

No.	Search terms
S12	S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10 or S11
S11	(MH "Attitude to Health+")
S10	(MH "Patient Education")
S9	psychosocial or psycho-social
S8	patient* and (complian* or adheren* or concordan*)
S7	service* N2 unacceptab*
S6	service* N2 acceptab*
S5	patient* N1 information*
S4	information N1 support*
S3	information N1 requirement*
S2	information N1 need*
S1	((client* or patient* or user* or carer* or consumer* or customer*) and (attitud* or priorit* or perception* or preferen* or expectation* or choice* or perspective* or view* or satisfact* or inform* or experience* or opinion*))

The Cochrane Library

No.	Search terms
#1	(client* or patient* or user* or carer* or consumer* or customer*) near/3 (attitud* or priorit* or

perception* or preferen* or expectation* or choice* or perspective* or view* or satisfact* or inform*)

#2	information NEXT need*
#3	information NEXT requirement*
#4	information NEXT support*
#5	service* near/2 attribute*
#6	service* near/2 acceptab*
#7	service* near/2 unacceptab*
#8	impact* OR psycholog* OR emotion* OR experience* OR subjective* OR status OR perception* OR consequence* OR sequelae OR meaning* OR rating* OR complian* OR adheren* OR concordan*
#9	(psycho-social OR psychosocial) OR (psycho NEXT social)
#10	patient NEXT education
#11	(#1OR #2OR #3OR #4OR #5OR #6OR #7OR #8OR #9OR #10)

Economics

The delirium patient filter was combined with the following filters for health economics and quality of life studies. Searches for health economics were performed on Medline, Embase, the Health Technology Appraisals (HTA) database and the NHS Economic Evaluations Database (NHSEED). The latter two databases were searched via the Cochrane Library using the delirium patient filter.

Medline

No.	Search terms
1	exp "costs and cost analysis"/
2	economics/
3	exp economics, hospital/
4	exp economics, medical/
5	exp economics, nursing/
6	exp economics, pharmaceutical/
7	exp "fees and charges"/
8	exp budgets/
9	ec.fs.
10	(economic$ or pharmacoeconomic$ or price$ or pricing$ or cost$ or budget$).ti,ab.
11	(value adj2 (money or monetary)).ti,ab.
12	(expenditure not energy).ti,ab.
13	or/1-12
14	((metabolic or energy or oxygen) adj1 cost$).ti,ab.
15	13 not 14
16	exp quality-adjusted life years/
17	quality adjusted life.tw.
18	exp "quality of life"/
19	value of life/
20	(qaly$ or qald$ or qale$ or qtime$).tw.
21	disability adjusted life.tw.
22	daly$.tw.

No.	
23	health status indicators/
24	(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).tw.
25	(sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw.
26	(sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).tw.
27	(sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).tw.
28	(sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw.
29	(euroqol or euro qol or eq5d or eq 5d).tw.
30	(hql or hqol or h qol or hrqol or hr qol).tw.
31	(hye or hyes).tw.
32	health$ year$ equivalent$.tw.
33	health utilit$.tw.
34	(hui or hui1 or hui2 or hui3).tw.
35	disutili$.tw.
36	rosser.tw.
37	quality of well?being.tw.
38	qwb.tw.
39	willingness to pay.tw.
40	standard gamble$.tw.
41	time trade off.tw.
42	time tradeoff.tw.
43	tto.tw.
44	or/16-43
45	15 or 44

1

2   Embase

No.	Search terms
1	health economics/
2	exp economic evaluation/
3	exp health care cost/
4	exp pharmacoeconomics/
5	exp fee/
6	budget/
7	(economic$ or pharmacoeconomic$ or cost$ or price$ or pricing$ or budget$).ti,ab.
8	(value adj2 (money or monetary$)).ti,ab.
9	(expenditure not energy).ti,ab.
10	or/1-9
11	((metabolic or energy or oxygen) adj1 cost$).ti,ab.
12	10 not 11
13	quality adjusted life year/
14	quality of life/
15	(qaly$ or qald$ or qale$ or qtime$).tw.
16	daly$.tw.
17	quality adjusted life.tw.
18	disability adjusted life.tw.
19	(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).tw.
20	(sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw.
21	(sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or

No.	Search terms
	short form twelve).tw.
22	(sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).tw.
23	(sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw.
24	(euroqol or euro qol or eq5d or eq 5d).tw.
25	(hql or hqol or h qol or hrqol or hr qol).tw.
26	(hye or hyes).tw.
27	health$ year$ equivalent$.tw.
28	health utilit$.tw.
29	(hui or hui1 or hui2 or hui3).tw.
30	disutili$.tw.
31	rosser.tw.
32	quality of well?being.tw.
33	qwb.tw.
34	willingness to pay.tw.
35	standard gamble$.tw.
36	time trade off.tw.
37	time tradeoff.tw.
38	tto.tw.
39	or/13-38
40	12 or 39

Epidemiology

The epidemiology searches are presented here in full with the exception of that for Cinahl (see note below).

Medline

No.	Search terms
1	incidence/
2	prevalence/
3	epidemiology/
4	ep.fs.
5	deliri$.ti,ab.
6	(acute adj2 (confusion$ or "brain syndrome" or "brain failure" or "psycho-organic syndrome" or "organic psychosyndrome")).mp.
7	(terminal$ adj restless$).mp.
8	toxic confus$.mp.
9	delirium/
10	confusion/
11	or/5-10
12	*psychoses, alcoholic/ or *alcohol withdrawal delirium/
13	*substance withdrawal syndrome/
14	12 or 13
15	11 not 14
16	delirium/ep

No.	Search terms
17	confusion/ep
18	or/5-8
19	or/1-3
20	18 and 19
21	20 or 16 or 17
22	11 and 19
23	21 or 22
24	23 not 14

1

2 Embase

No.	Search terms
1	incidence/
2	prevalence/
3	exp epidemiology/
4	ep.fs.
5	delirium/
6	(acute adj2 (confusion$ or "brain syndrome" or "brain failure" or "psycho-organic syndrome" or "organic psychosyndrome")).mp.
7	deliri$.ti,ab.
8	(terminal$ adj restless$).mp.
9	toxic confus$.mp.
10	or/5-9
11	*alcohol psychosis/
12	*delirium tremens/
13	*withdrawal syndrome/
14	or/11-13
15	10 not 14
16	delirium/ep
17	or/6-9
18	or/1-3
19	17 and 18
21	16 or 19
22	10 and 18
23	22 or 23
24	23 not 14

3

4 PsycINFO

No.	Search terms
1	exp delirium/
2	deliri$.ti,ab.
3	(acute adj2 (confusion* or "brain syndrome" or "brain failure" or "psycho-organic syndrome" or "organic psychosyndrome")).ti,ab,sh.
4	(terminal* adj restless*).ti,ab,sh.
5	toxic confus*.ti,ab,sh.
6	or/1-5
7	*drug withdrawal/
8	*alcohol withdrawal/
9	*alcoholic psychosis/
10	*delirium tremens/

No.	Search terms
11	or/7-10
12	6 not 11
13	exp epidemiology/
14	(inciden* or prevalen* or frequency or occurence* or outbreak*).ti,ab,sh.
15	13 or 14
16	12 and 15

Cinahl

The following search strategy was combined with the delirium patient filter.

No.	Search terms
S4	S1 or S2 or S3
S3	MH "Incidence"
S2	MW "Epidemiology"
S1	MH "Prevalence"

1.1 Consequences

Top level searches were carried out to provide evidence for the review of the health consequences of delirium. Searches were restricted by date to studies published since 1990 unless there was a more recently published NICE clinical guideline. Where this was the case searches were performed from the last search date of the relevant guideline. Searches were performed on Medline, Embase, the Health Technology Appraisals (HTA) database and the NHS Economic Evaluations Database (NHSEED). The searches on Medline and Embase were combined with the health economics filters detailed above.

Medline

No.	Search terms
1	*accidental falls/
2	limit 1 to yr="2004 - 2009"
3	*pressure ulcer/
4	limit 3 to yr="2005 - 2009"
5	*cognition disorders/
6	limit 5 to yr="1990 - 2009"
7	*dementia/
8	limit 7 to yr="1990 - 2009"
9	*stress disorders, post-traumatic/
10	limit 9 to yr="2005 - 2009"
11	*stroke/
12	limit 11 to yr="2008 - 2009"
13	((extrapyramidal or extra-pyramidal) adj (symptom$ or disorder$)).ti,ab.
14	limit 13 to yr="1990 - 2009"
15	*long-term care/

No.	Search terms
16	*nursing homes/
17	*homes for the aged/
18	or/15-17
19	limit 18 to yr="1990 - 2009"
20	(persist$ and deliri$).tw.
21	limit 20 to yr="1990 - 2009"
22	2 or 4 or 6 or 8 or 10 or 12 or 14 or 19 or 21

Embase

No.	Search terms
1	*falling/
2	limit 1 to yr="2004 - 2009"
3	*decubitus/
4	limit 3 to yr="2005 - 2009"
5	*cognitive defect/
6	limit 5 to yr="1990 - 2009"
7	*dementia/
8	limit 7 to yr="1990 - 2009"
9	*posttraumatic stress disorder/
10	limit 9 to yr="2005 - 2009"
11	*stroke/
12	limit 11 to yr="2008 - 2009"
13	*extrapyramidal symptom/
14	limit 13 to yr="1990 - 2009"
15	*long term care/
16	*home for the aged/
17	*nursing home/
18	or/15-17
19	limit 18 to yr="1990 - 2009"
20	(persist$ and deliri$).tw.
21	limit 20 to yr="1990 - 2009"
22	2 or 4 or 6 or 8 or 10 or 12 or 14 or 19 or 21

The Cochrane Library

NHSEED and HTA database were searched via The Cochrane Library

No.	Search terms
#1	((fall or falls or falling or faller* or fallen or slip or trip or trips or tripped):ti,ab) or (fall*):kw, from 2004 to 2009
#2	((pressure next ulcer*) or (pressure next wound*) or (pressure next damag*) or (pressure next injur*)):ti,kw,ab
#3	MeSH descriptor Pressure Ulcer, this term only
#4	(#2 OR #3), from 2005 to 2009
#5	((cognition OR cognitive* OR intellectual* OR neurological*) AND (impair* OR problem)):ti,ab,kw
#6	((cognition OR cognitive) AND (disorder* OR defect*)):ti,ab,kw
#7	(#5 OR #6), from 1990 to 2009

#8   dementia:ti,ab,kw, from 1990 to 2009

#9   ((ptsd) or (posttraumatic or post-traumatic) or (post next traumatic)):ti,ab,kw

#10   MeSH descriptor Stress Disorders, Post-Traumatic, this term only

#11   (#9 OR #10), from 2005 to 2009

#12   stroke:ti,ab,kw, from 2008 to 2009

#13   ((extrapyramidal or extra-pyramidal) near/2 (symptom* or disorder*)):ti,ab,kw, from 1990 to 2009

#14   (long term care or long-term care):ti,kw,ab

#15   MeSH descriptor Long-Term Care, this term only

#16   MeSH descriptor Nursing Homes, this term only

#17   MeSH descriptor Homes for the Aged, this term only

#18   (#14 OR #15 OR #16 OR #17), from 1990 to 2009

#19   (persist* and deliri*):ti,kw,ab, from 1990 to 2009

#20   (#1 OR #4 OR #7 OR #8 OR #11 OR #12 OR #13 OR #18 OR #19)

1
2
3