

Draft

Care of the dying adult

Search strategies appendix

Clinical guideline

Appendices

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Draft

*Commissioned by the National Institute for
Health and Care Excellence*

Disclaimer

Healthcare professionals are expected to take NICE clinical guidelines fully into account when exercising their clinical judgement. However, the guidance does not override the responsibility of healthcare professionals to make decisions appropriate to the circumstances of each patient, in consultation with the patient and, where appropriate, their guardian or carer.

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Contents

Appendix A: Literature search strategies	5
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Appendix A: Literature search strategies

A.1 Contents

Introduction	Search methodology
Section A.1	Study filter terms
A.1.1	Systematic reviews (SR)
A.1.2	Randomised controlled trials (RCT)
A.1.3	Health economic studies (HE)
A.1.4	Excluded study designs and publication types
Section A.2	Searches for specific questions with intervention
A.2.1	Recognising dying
A.2.2	Communication
A.2.3	Shared decision making
A.2.4	Maintaining hydration
A.2.5	Respiratory secretions
A.2.6	Pharmacological agents: pain, anxiety, breathlessness, agitation and delirium
A.2.7	Pharmacological agents: nausea and vomiting
A.2.8	Anticipatory prescribing
Section A.3.	Health economics searches
A.3.1	Health economic reviews
Section A.4.	Minimally important difference searches

Search strategies used for the care of the dying adult guideline are outlined below and were run in accordance with the methodology in the NICE guidelines manual 2012.^{NICE2012} All searches were run up to **as indicated in table 2 below**. Any studies added to the databases after this date (even those published prior to this date) were not included unless specifically stated in the text. We do not routinely search for electronic, ahead of print or 'online early' publications. Where possible searches were limited to retrieve material published in English.

Table 1: Database date parameters

Database	Date search from
Medline	1946
Embase	1974
The Cochrane Library	Cochrane Reviews up to Issue 01/2015 CENTRAL up to 01/2015 DARE, HTA and NHSEED up to 01/15
CINAHL	1960
PsycINFO (OVID)	1967

Searches for the **clinical reviews** were run in Medline (OVID) and Embase (OVID). Additional searches were run in the Cochrane Library, CINAHL (EBSCO) and PsycInfo (OVID) for some questions. See Table 2.

Table 2: Databases searched by question

Question	Question number	Databases	Date search run (specific parameters are outlined in question summary)
Recognising dying	A.2.1	Medline, Embase, Cochrane	29/10/14
Communication	A.2.2	Medline, Embase, Cochrane, CINAHL, PsycINFO	16/12/15
Shared decision making	A.2.3	Medline, Embase, Cochrane, CINAHL, PsycINFO	17/12/15
Maintaining hydration	A.2.4	Medline, Embase, Cochrane, CINAHL	29/09/14
Respiratory secretions	A.2.5	Medline, Embase, Cochrane, CINAHL	04/11/14
Pharmacological agents: pain, anxiety, breathlessness, agitation and delirium	A.2.6	Medline, Embase, Cochrane,	09/01/15
Pharmacological agents: nausea and vomiting	A.2.7	Medline, Embase, Cochrane,	11/11/14
Anticipatory prescribing	A.2.8	Medline, Embase, Cochrane, CINAHL	07/01/15
Health economics	A.3.1	Medline, Embase, HTA & NHS EED on CRD, HEED	10/10/14
Minimally Important differences	A.4	Medline, Embase	20/04/15

Searches for **intervention and diagnostic studies** were usually constructed using a PICO format where population (P) terms were combined with Intervention (I) and sometimes Comparison (C) terms. An intervention can be a drug, a procedure or a diagnostic test. Outcomes (O) are rarely used in search strategies for interventions. Search filters were also added to the search where appropriate.

Searches for **prognostic studies** were usually constructed combining population terms with prognostic variable terms and sometimes outcomes. Search filters were added to the search where appropriate.

Searches for the **health economic reviews** were run in Medline (OVID), Embase (OVID), the NHS Economic Evaluations Database (NHS EED), the Health Technology Assessment (HTA) database and the Health Economic Evaluation Database (HEED). Searches in NHS EED and HEED were constructed using population terms only. For Medline and Embase an economic filter (instead of a study type filter) was added to the same clinical search strategy.

Searches for **minimally important differences** were run in Medline (OVID) and Embase (OVID)

A.1 Study filter search terms

A.1.1 Systematic review (SR) search terms

Medline search terms

1.	meta-analysis/
2.	meta-analysis as topic/

3.	(meta analy* or metanaly* or metaanaly*).ti,ab.
4.	((systematic* or evidence*) adj3 (review* or overview*)).ti,ab.
5.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
6.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
7.	(search* adj4 literature).ab.
8.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
9.	cochrane.jw.
10.	or/1-9

Embase search terms

1.	systematic review/
2.	meta-analysis/
3.	(meta analy* or metanaly* or metaanaly*).ti,ab.
4.	((systematic or evidence) adj3 (review* or overview*)).ti,ab.
5.	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
6.	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
7.	(search* adj4 literature).ab.
8.	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
9.	((pool* or combined) adj2 (data or trials or studies or results)).ab.
10.	cochrane.jw.
11.	or/1-10

A.1.2 Randomised controlled trials (RCTs) search terms

Medline search terms

1.	randomized controlled trial.pt.
2.	controlled clinical trial.pt.
3.	randomi#ed.ab.
4.	placebo.ab.
5.	randomly.ab.
6.	clinical trials as topic.sh.
7.	trial.ti.
8.	or/1-7

Embase search terms

1.	random*.ti,ab.
2.	factorial*.ti,ab.
3.	(crossover* or cross over*).ti,ab.
4.	((doubl* or singl*) adj blind*).ti,ab.
5.	(assign* or allocat* or volunteer* or placebo*).ti,ab.
6.	crossover procedure/
7.	double blind procedure/
8.	single blind procedure/
9.	randomized controlled trial/
10.	or/1-9

A.1.3 Health economics (HE) search terms

Medline search terms

1.	economics/
2.	value of life/
3.	exp "costs and cost analysis"/
4.	exp economics, hospital/
5.	exp economics, medical/
6.	economics, nursing/
7.	economics, pharmaceutical/
8.	exp "fees and charges"/
9.	exp budgets/
10.	budget*.ti,ab.
11.	cost*.ti.
12.	(economic* or pharmaco?economic*).ti.
13.	(price* or pricing*).ti,ab.
14.	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.
15.	(financ* or fee or fees).ti,ab.
16.	(value adj2 (money or monetary)).ti,ab.
17.	or/1-16

Embase search terms

1.	health economics/
2.	exp economic evaluation/
3.	exp health care cost/
4.	exp fee/
5.	budget/
6.	funding/
7.	budget*.ti,ab.
8.	cost*.ti.
9.	(economic* or pharmaco?economic*).ti.
10.	(price* or pricing*).ti,ab.
11.	(cost* adj2 (effective* or utilit* or benefit* or minimi* or unit* or estimat* or variable*)).ab.
12.	(financ* or fee or fees).ti,ab.
13.	(value adj2 (money or monetary)).ti,ab.
14.	or/1-13

A.1.4 Excluded study designs and publication types

The following study designs and publication types were removed from retrieved results using the NOT operator.

Medline search terms

1.	letter/
2.	editorial/
3.	news/
4.	exp historical article/

5.	anecdotes as topic/
6.	comment/
7.	case report/
8.	(letter or comment*).ti.
9.	or/1-8
10.	randomized controlled trial/ or random*.ti,ab.
11.	9 not 10
12.	animals/ not humans/
13.	exp animals, laboratory/
14.	exp animal experimentation/
15.	exp models, animal/
16.	exp rodentia/
17.	(rat or rats or mouse or mice).ti.
18.	or/11-17

Embase search terms

1.	letter.pt. or letter/
2.	note.pt.
3.	editorial.pt.
4.	case report/ or case study/
5.	(letter or comment*).ti.
6.	or/1-5
7.	randomized controlled trial/ or random*.ti,ab.
8.	6 not 7
9.	animal/ not human/
10.	nonhuman/
11.	exp animal experiment/
12.	exp experimental animal/
13.	animal model/
14.	exp rodent/
15.	(rat or rats or mouse or mice).ti.
16.	or/8-15

PsycInfo search terms

1.	animals/ not humans/
2.	exp rodents/ or exp mice/
3.	(rat or rats or mouse or mice).ti.
4.	or/1-3

A.2 Searches for specific questions

A.2.1 Recognising dying

1. What signs and symptoms indicate that adults are likely to be entering their final days of life; or that they may be recovering? How are uncertainties about either situation dealt with?

Medline search terms

1.	Death/
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2.	(dying or die* or death).ti,kf.	
3.	Terminally ill/ or Terminal care/ or Palliative care/	
4.	((terminal or palliati*) adj1 care).ti,kf.	
5.	"terminally ill".ti,kf.	
6.	"terminal illness".ti,kf.	
7.	(palliati* adj1 stage*).ti,ab.	
8.	("end of life" adj2 (stage or stages)).ti,ab.	
9.	or/1-9	
10.	"end of life".ti,ab.	
11.	((last or final) adj1 (hour* or days* or minute* or stage* or week* or month*)).ti,ab.	
12.	((dying or terminal) adj1 phase*).ti,ab.	
13.	((dying or terminal or end) adj1 stage*).ti,ab.	
14.	(dying adj2 (actively or begin* or begun)).ti,ab.	
15.	(death adj2 (imminent* or impending or near or throes)).ti,ab.	
16.	((dying or death) adj2 (patient* or person* or people)).ti,ab.	
17.	(Body adj2 (shut down or shutting down or deteriorat*)).ti,ab.	
18.	deathbed.ti,ab.	
19.	or/10-18	
20.	9 and 19	Population
21.	symptom assessment/	
22.	diagnosis/ or prognosis/	
23.	(diagnos* or prognos* or assess* or criteria* or predict*).ti,kf.	
24.	(sign or signs or symptom* or recogni* or identif*).ti,ab.	
25.	agonal.ti,ab.	
26.	multiple organ failure/	
27.	(organ* adj2 fail*).ti,ab.	
28.	(organ* adj2 dysfunction*).ti,ab.	
29.	or/21-28	Intervention
30.	20 and 29	
31.	Excluded study designs and publication types limit A.1.4	
32.	30 not 31	
33.	Limit 32 to English language	

Embase search terms

1.	Death/
2.	(dying or die* or death).ti,kw.
3.	Terminally ill patient/ or Terminal care/ or Palliative therapy/
4.	((terminal or palliati*) adj1 care).ti,kw.
5.	"terminally ill".ti,kw.
6.	"terminal illness".ti,kw.
7.	(palliati* adj1 stage*).ti,ab.
8.	("end of life" adj2 (stage or stages)).ti,ab.
9.	or/1-8
10.	"end of life".ti,ab.

11.	((last or final) adj1 (hour* or days* or minute* or stage* or week* or month*)).ti,ab.	
12.	((dying or terminal) adj1 phase*).ti,ab.	
13.	((dying or terminal or end) adj1 stage*).ti,ab.	
14.	(dying adj2 (actively or begin* or begun)).ti,ab.	
15.	(death adj2 (imminent* or impending or near or throes)).ti,ab.	
16.	((dying or death) adj2 (patient* or person* or people)).ti,ab.	
17.	(Body adj2 (shut down or shutting down or deteriorat*)).ti,ab.	
18.	deathbed.ti,ab.	
19.	or/10-18	
20.	9 and 19	Population
21.	symptom assessment/	
22.	diagnosis/ or prognosis/	
23.	(diagnos* or prognos* or assess* or criteria* or predict*).ti,kw.	
24.	(sign or signs or symptom* or recogni* or identif*).ti,ab.	
25.	*multiple organ failure/	
26.	(organ* adj2 fail*).ti,ab.	
27.	(organ* adj2 dysfunction*).ti,ab.	
28.	or/21-27	Intervention
29.	20 and 28	
30.	Excluded study designs and publication types limit A.1.4	
31.	29 not 30	
32.	Limit 31 to English language	

Cochrane search terms

#1.	MeSH descriptor: [Death] this term only
#2.	(dying or die* or death):ti,kw
#3.	MeSH descriptor: [Terminally Ill] this term only
#4.	MeSH descriptor: [Terminal Care] this term only
#5.	MeSH descriptor: [Palliative Care] this term only
#6.	(terminal or palliati*) near/1 care:ti,kw
#7.	terminally ill:ti,kw
#8.	terminal illness:ti,kw
#9.	palliati* near/1 stage*:ti,ab
#10.	("end of life" near/2 (stage or stages)):ti,kw
#11.	{or #1-#10}
#12.	end of life:ti,ab
#13.	((last or final) near/1 (hour* or days* or minute* or stage* or week* or month*)):ti,ab
#14.	(dying or terminal) near/1 phase*:ti,ab
#15.	(dying or terminal or end) near/1 stage*:ti,ab
#16.	dying near/2 (actively or begin* or begun):ti,ab
#17.	(death near/2 (imminent* or impending or "near" or throes)):ti,ab
#18.	((dying or death) near/2 (patient* or person* or people)):ti,ab
#19.	body near/2 (shut down or shutting down or deteriorat*):ti,ab
#20.	deathbed:ti,ab
#21.	{or #12-#20}

#22.	#11 and #21	Population
#23.	MeSH descriptor: [symptom assessment] this term only	
#24.	MeSH descriptor: [diagnosis] this term only	
#25.	MeSH descriptor: [prognosis] this term only	
#26.	(diagnos* or prognos* or assess* or criteria* or predict*):ti,kw	
#27.	(sign or signs or symptom* or recogni* or identif*):ti,ab	
#28.	agonal:ti,ab	
#29.	MeSH descriptor: [multiple organ failure] explode all trees	
#30.	(organ* near/2 fail*):ti,ab	
#31.	(organ* near/2 dysfunction*):ti,ab	
#32.	{or #23-#31}	Intervention
#33.	#22 and #32	

A.2.2 Communication

2. What are the barriers and facilitators to good communication between the dying person, those important to them and the healthcare professional surrounding the likelihood of entering the last days of life?

We undertook separate searches for shared decision making and communication with the understanding that due to common terminology the separate searches may retrieve papers relevant for either question.

Medline search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill/ or terminal care/ or palliative care/	
4.	((terminal or palliati*) adj1 care).ti,kf.	
5.	"terminally ill".ti,kf.	
6.	"terminal illness".ti,kf.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	((communicat* or discuss* or speak* or talk* or convers*) adj3 (prognosis or life expectanc* or death* or dying or end of life or terminal* or palliat* or recover* or (get* adj2 better*) or improve* or improving or improvement or return* or conscious*)).ti,ab.	Narrow Population1 and narrow Intervention1
15.	(communicat* or discuss* or speak* or talk* or convers*).ti,ab.	Narrow intervention2
16.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
17.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
18.	deathbed.ti,ab.	
19.	or/16-18	Narrow population2

20.	15 and 19	Narrow intervention2 and narrow population2
21.	14 or 20	Final intervention
22.	13 and 21	
23.	Excluded study designs and publication types limit A.1.4	
24.	22 not 23	
25.	Limit 24 to English language	

Embase search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill patient/ or terminal care/ or palliative therapy/	
4.	((terminal or palliati*) adj1 care).ti,kw.	
5.	"terminally ill".ti,kw.	
6.	"terminal illness".ti,kw.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or stage* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shut* down or shutdown or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	((communicat* or discuss* or speak* or talk* or convers*) adj3 (prognosis or life expectanc* or death* or dying or end of life or terminal* or palliat* or recover* or (get* adj2 better*) or improve* or improving or improvement or return* or conscious*)).ti,ab.	Narrow Population1 and narrow intervention1
15.	(communicat* or discuss* or speak* or talk* or convers*).ti,ab.	Narrow intervention2
16.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
17.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
18.	deathbed.ti,ab.	
19.	or/16-18	Narrow population2
20.	15 and 19	Narrow Intervention2 and narrow population2
21.	14 or 20	Final intervention
22.	13 and 21	
23.	Excluded study designs and publication types limit A.1.4	
24.	22 not 23	
25.	Limit 24 to English language	

Cochrane search terms

#1.	MeSH descriptor: [terminally ill] explode all trees
#2.	MeSH descriptor: [terminal care] explode all trees
#3.	MeSH descriptor: [palliative care] explode all trees
#4.	MeSH descriptor: [death] explode all trees

#5.	((palliati* or terminal or end) near/1 stage*):ti,ab,kw	
#6.	((terminal or palliati*) near/1 care):ti,ab,kw	
#7.	(dying or death):ti,ab,kw	
#8.	terminally ill:ti,ab,kw	
#9.	terminal illness:ti,ab,kw	
#10.	(terminal near/1 phase*):ti,ab,kw	
#11.	end of life:ti,ab,kw	
#12.	((last or final) near/1 (hour* or day* or minute* or stage* or week* or month* or moment*)):ti,ab,kw	
#13.	(body near/2 (shutdown or shut* down or deteriorat*)):ti,ab,kw	
#14.	deathbed:ti,ab,kw	
#15.	{or #1-#14}	Population
#16.	((communicat* or discuss* or speak* or talk* or convers*) near/3 (prognosis or life expectanc* or death* or dying or end of life or terminal* or palliat* or recover* or (get* near/2 better*) or improve* or improving or improvement or return* or conscious*)):ti,ab	Narrow population1 and intervention1
#17.	(communicat* or discuss* or speak* or talk* or convers*):ti,ab	Narrow intervention2
#18.	((last or final) near/1 (hour* or day* or minute* or week* or month* or moment*)):ti,ab	
#19.	(Body near/2 (shutdown or shut* down or deteriorat*)):ti,ab	
#20.	deathbed.ti,ab.	
#21.	#18 or #19 or #20	Narrow population2
#22.	#17 and #21	Narrow population2 and intervention2
#23.	#16 or #22	Final Intervention
#24.	#15 and #23	

Cinahl search terms

S1.	(MH "death"# or #MH "terminally ill patients"# or #MH "terminal care"# or #MH "palliative care"#	
S2.	(dying or death)	
S3.	((terminal or palliati*) n1 care)	
S4.	terminally ill or terminal illness	
S5.	((palliati* or terminal or end) n1 stage*)	
S6.	(terminal n1 phase*)	
S7.	end of life	
S8.	((last or final) n1 (hour* or day* or minute* or week* or month* or moment*))	
S9.	(body n2 (shutdown or shut* down or deteriorat*))	
S10.	deathbed	
S11.	S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10	Population
S12.	((communicat* or discuss* or speak* or talk* or convers*) n3 (prognosis or life expectanc* or death* or dying or end of life or terminal* or palliat* or recover* or (get* n2 better*) or improve* or improving or improvement or return* or conscious*))	Narrow population1 and intervention1
S13.	(communicat* or discuss* or speak* or talk*	Narrow Intervention2

	or convers*)	
S14.	((last or final) n1 (hour* or day* or minute* or week* or month* or moment*))	
S15.	(body n2 (shutdown or shut* down or deteriorat*))	
S16.	deathbed	
S17.	S14 OR S15 OR S16	Narrow Population2
S18.	S13 AND S17	Narrow population2 and intervention2
S19.	S12 OR S18	Final intervention
S20.	S11 and S19	<i>Limits: Exclude Medline, Humans</i>

PsycInfo search terms

1.	(dying or death).ti,ab.	
2.	terminally ill/ or terminal care/ or palliative care/	
3.	((terminal or palliati*) adj1 care).ti,ab.	
4.	"terminally ill".ti,ab.	
5.	"terminal illness".ti,ab.	
6.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
7.	(terminal adj1 phase*).ti,ab.	
8.	"end of life".ti,ab.	
9.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
10.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
11.	deathbed.ti,ab.	
12.	exp "death and dying"/	
13.	or/1-12	Population
14.	((communicat* or discuss* or speak* or talk* or convers*) adj3 (prognosis or life expectanc* or death* or dying or end of life or terminal* or palliat* or recover* or (get* adj2 better*) or improve* or improving or improvement or return* or conscious*)).ti,ab.	Narrow population1 and intervention1
15.	(communicat* or discuss* or speak* or talk* or convers*).ti,ab.	Narrow Intervention2
16.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
17.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
18.	deathbed.ti,ab.	
19.	or/16-18	Narrow Population2
20.	15 and 19	Narrow Intervention2 and population2
21.	14 or 20	Final intervention
22.	13 and 21	
23.	Excluded study designs and publication types limit A.1.4	
24.	22 not 23	
25.	Limit 24 to English language	

A.2.3 Shared decision making

3. What are the facilitators and barriers to the multi-professional team, dying person and those important to them in being involved in shared decision making to inform the development of personalised care plans for the last days of life?

We undertook separate searches for shared decision making and communication with the understanding that due to common terminology the separate searches may retrieve papers relevant for either question.

Medline search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill/ or terminal care/ or palliative care/	
4.	((terminal or palliati*) adj1 care).ti,kf.	
5.	"terminally ill".ti,kf.	
6.	"terminal illness".ti,kf.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	*decision making/	
15.	((share* or sharing or making or made or agree* or participat* or support* or collaborat* or joint) adj1 decision*).ti,ab.	
16.	exp consumer participation/	
17.	patient care planning/	
18.	exp advance care planning/	
19.	((care or treatment or admission* or personal* or individual*) adj2 plan*).ti,ab.	
20.	or/14-19	Intervention1
21.	attitude of health personnel/	
22.	attitude to death/	
23.	((health professional or health personnel or physician* or consultant* or nurse* or doctor* or health care assistant* or healthcare assistant*) adj4 (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence*)).ti,ab.	
24.	((consumer* or client* or resident* or patient* or people or person or spouse* or wife or wives or husband* or carer* or caregiver* or care giver* or significant other* or family or families or individual*) adj4 (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence* or wish* or choice*)).ti,ab.	
25.	((interdisciplinary or multidisciplinary or combin* or inter disciplinary or multi disciplinary or interprofessional or multiprofessional or inter professional or multi professional) adj2 (work* or team* or care or ward#)).ti,ab.	
26.	or/21-25	Intervention2
27.	13 and 20 and 26	
28.	Excluded study designs and publication types limit A.1.4	
29.	27 not 28	
30.	Limit 29 to English language	

Embase search terms

1.	death/
2.	(dying or death).ti,ab.

3.	terminally ill patient/ or terminal care/ or palliative therapy/	
4.	((terminal or palliati*) adj1 care).ti,kw.	
5.	"terminally ill".ti,kw.	
6.	"terminal illness".ti,kw.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or stage* or week* or month* or moment*).ti,ab.	
11.	(body adj2 (shut* down or shutdown or deteriorat*).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	*decision making/	
15.	((share* or sharing or making or made or agree* or participat* or support* or collaborat* or joint) adj1 decision*).ti,ab.	
16.	*patient care planning/	
17.	((care or treatment or admission* or personal* or individual*) adj2 plan*).ti,ab.	
18.	or/14-17	Intervention1
19.	*health personnel attitude/	
20.	*attitude to death/	
21.	((health professional or health personnel or physician* or consultant* or nurse* or doctor* or health care assistant* or healthcare assistant*) adj4 (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence*).ti,ab.	
22.	((consumer* or client* or resident* or patient* or people or person or spouse* or wife or wives or husband* or carer* or caregiver* or care giver* or significant other* or family or families or individual*) adj4 (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence* or wish* or choice*).ti,ab.	
23.	((interdisciplinary or multidisciplinary or combin* or inter disciplinary or multi disciplinary or interprofessional or multiprofessional or inter professional or multi professional) adj2 (work* or team* or care or ward#)).ti,ab.	
24.	or/19-23	Intervention2
25.	13 and 18 and 24	
26.	Excluded study designs and publication types limit A.1.4	
27.	25 not 26	
28.	Limit 27 to English language	

Cochrane search terms

#1.	MeSH descriptor: [terminally ill] explode all trees
#2.	MeSH descriptor: [terminal care] explode all trees
#3.	MeSH descriptor: [palliative care] explode all trees
#4.	MeSH descriptor: [death] explode all trees
#5.	((palliati* or terminal or end) near/1 stage*).ti,ab,kw
#6.	((terminal or palliati*) near/1 care):ti,ab,kw
#7.	(dying or death):ti,ab,kw
#8.	terminally ill:ti,ab,kw
#9.	terminal illness:ti,ab,kw

#10.	(terminal near/1 phase*):ti,ab,kw	
#11.	end of life:ti,ab,kw	
#12.	((last or final) near/1 (hour* or day* or minute* or stage* or week* or month* or moment*)):ti,ab,kw	
#13.	(body near/2 (shutdown or shut* down or deteriorat*)):ti,ab,kw	
#14.	deathbed:ti,ab,kw	
#15.	{or #1-#14}	Population
#16.	MeSH descriptor: [decision making] this term only	
#17.	((share* or sharing or making or made or agree* or participat* or support* or collaborat* or joint) near/1 decision*):ti,ab	
#18.	MeSH descriptor: [consumer participation] explode all trees	
#19.	MeSH descriptor: [patient care planning] explode all trees	
#20.	MeSH descriptor: [advance care planning] explode all trees	
#21.	((care or treatment or admission* or personal* or individual*) near/2 plan*):ti,ab	
#22.	{or #16-#21	Intervention1
#23.	MeSH descriptor: [attitude of health personnel] this term only	
#24.	MeSH descriptor: [attitude to death] this term only	
#25.	((health professional or health personnel or physician* or consultant* or nurse* or doctor* or health care assistant* or healthcare assistant*) near/4 (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence*)):ti,ab	
#26.	((consumer* or client* or resident* or patient* or people or person or spouse* or wife or wives or husband* or carer* or caregiver* or care giver* or significant other* or family or families or individual*) near/4 (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence* or wish* or choice*)):ti,ab	
#27.	((interdisciplinary or multidisciplinary or combin* or inter disciplinary or multi disciplinary or interprofessional or multiprofessional or inter professional or multi professional) near/2 (work* or team* or care or ward*)):ti,ab	
#28.	{or #23-#27}	Intervention2
#29.	#15 and #22 and #28	

Cinahl search terms

S1.	(MH "death"# or #MH "terminally ill patients"# or #MH "terminal care"# or #MH "palliative care"#	
S2.	(dying or death)	
S3.	((terminal or palliati*) n1 care)	
S4.	terminally ill or terminal illness	
S5.	((palliati* or terminal or end) n1 stage*)	
S6.	(terminal n1 phase*)	
S7.	end of life	
S8.	((last or final) n1 (hour* or day* or minute* or week* or month* or moment*))	
S9.	(body n2 (shutdown or shut* down or deteriorat*))	
S10.	deathbed	
S11.	S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10	Population
S12.	(MM "decision making") or (MM "decision making, patient") or (MM "decision making, family")	
S13.	(share* or sharing or making or made or agree* or participat* or support* or collaborat* or	

	joint) and decision*	
S14.	(MM "consumer participation")	
S15.	(MM "patient care plans")	
S16.	(MM "advance care planning")	
S17.	(care or treatment or admission* or personal* or individual*) and plan*	
S18.	S12 or S13 or S14 or S15 or S16 or S17	Intervention1
S19.	(MM "attitude of health personnel")	
S20.	(MM "attitude to death")	
S21.	(health professional or health personnel or physician* or consultant* or nurse* or doctor* or health care assistant* or healthcare assistant*) and (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence*)	
S22.	(consumer* or client* or resident* or patient* or people or person or spouse* or wife or wives or husband* or carer* or caregiver* or care giver* or significant other* or family or families or individual*) and (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence* or wish* or choice*)	
S23.	(interdisciplinary or multidisciplinary or combin* or inter disciplinary or multi disciplinary or interprofessional or multiprofessional or inter professional or multi professional) and (work* or team* or care or ward*)	
S24.	S19 or S20 or S21 or S22 or S23	Intervention2
S25.	S11 and S18 and S24	Limits: exclude Medline, Humans

PsycInfo search terms

1.	(dying or death).ti,ab.	
2.	terminally ill/ or terminal care/ or palliative care/	
3.	((terminal or palliati*) adj1 care).ti,ab.	
4.	"terminally ill".ti,ab.	
5.	"terminal illness".ti,ab.	
6.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
7.	(terminal adj1 phase*).ti,ab.	
8.	"end of life".ti,ab.	
9.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
10.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
11.	deathbed.ti,ab.	
12.	exp "death and dying"/	
13.	or/1-12	Population
14.	*decision making/	
15.	((share* or sharing or making or made or agree* or participat* or support* or collaborat* or joint) adj1 decision*).ti,ab.	
16.	*consumer behavior/	
17.	exp treatment planning/	
18.	*group decision making/	
19.	((care or treatment or admission* or personal* or individual*) adj2 plan*).ti,ab.	
20.	or/14-19	Intervention1
21.	health personnel attitudes/	
22.	death attitudes/	

23.	*advance directives/	
24.	((health professional or health personnel or physician* or consultant* or nurse* or doctor* or health care assistant* or healthcare assistant*) adj4 (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence*)).ti,ab.	
25.	((consumer* or client* or resident* or patient* or people or person or spouse* or wife or wives or husband* or carer* or caregiver* or care giver* or significant other* or family or families or individual*) adj4 (preference* or satisfaction or satisfied or satisfaction or satisfy or experience* or need* or facilitator or facilitation or facilitate or barrier* or relation* or attitude* or reticence* or wish* or choice*)).ti,ab.	
26.	((interdisciplinary or multidisciplinary or combin* or inter disciplinary or multi disciplinary or interprofessional or multiprofessional or inter professional or multi professional) adj2 (work* or team* or care or ward#)).ti,ab.	
27.	or/21-26	Intervention2
28.	13 and 20 and 27	
29.	Excluded study designs and publication types limit A.1.4	
30.	28 not 29	
31.	Limit 30 to English language	

A.2.4 Maintaining hydration

4. For people in the last days of life is clinically assisted hydration effective compared to oral hydration or placebo?

We updated the Cochrane search strategy from the review: Good P, Richard R, Syrmis W, Jenkins-Marsh S, Stephens J. Medically assisted hydration for adult palliative care patients. Cochrane Database of Systematic Reviews 2014, Issue 4. Art. No.: CD006273. DOI: 10.1002/14651858.CD006273.pub3.

The search was conducted in Cochrane Central Register of Controlled Trials (CENTRAL) only; we expanded this by searching the Cochrane Database of Systematic Reviews (CDSR) and the Database of Reviews and Abstracts (DARE). We did not search the science citation index as we did not have access.

Medline search terms

1.	exp palliative care/	
2.	palliat*.tw.	
3.	terminally ill/	
4.	terminal care/	
5.	(terminal* adj6 care*).tw.	
6.	((terminal* adj6 ill*) or terminal-stage* or dying or (close adj6 death)).tw.	
7.	(terminal* adj6 disease*).tw.	
8.	(end adj6 life).tw.	
9.	hospice*.tw.	
10.	("end-stage disease*" or "end stage disease*" or "end-stage illness or end stage").tw.	
11.	"advanced disease*".tw.	
12.	("incurable illness*" or "incurable disease*").tw.	
13.	("advanced directive*" or "living will*" or "do-not-resuscitate order*").tw.	
14.	or/1-13	Population

15.	fluid therapy/	
16.	dehydration/	
17.	(hydrat* or dehydrat* or rehydrat* or (fluid* adj6 therap*) or (fluid* adj6 balance*) or (fluid* adj6 manag*) or hypodermoclysis).tw.	
18.	or/15-17	Intervention
19.	14 and 18	

Embase search terms

1.	exp palliative care/	
2.	palliat*.tw.	
3.	terminally ill/	
4.	terminal care/	
5.	(terminal* adj6 care*).tw.	
6.	((terminal* adj6 ill*) or terminal-stage* or dying or (close adj6 death)).tw.	
7.	(terminal* adj6 disease*).tw.	
8.	(end adj6 life).tw.	
9.	hospice*.tw.	
10.	("end-stage disease*" or "end stage disease*" or "end-stage illness" or "end stage").tw.	
11.	"advanced disease*".tw.	
12.	("incurable illness*" or "incurable disease*").tw.	
13.	("advanced directive*" or "living will*" or "do-not-resuscitate order*").tw.	
14.	or/1-13	Population
15.	fluid therapy/	
16.	dehydration/	
17.	(hydrat* or dehydrat* or rehydrat* or (fluid* adj6 therap*) or (fluid* adj6 balance*) or (fluid* adj6 manag*) or hypodermoclysis).tw.	
18.	or/15-17	Intervention
19.	14 and 18	

Cochrane search terms

#1.	MeSH descriptor: [palliative care] explode all trees	
#2.	palliat*:ti,ab,kw	
#3.	MeSH descriptor: [terminally ill] this term only	
#4.	MeSH descriptor: [terminal care] explode all trees	
#5.	(terminal* near/6 care*):ti,ab,kw	
#6.	((terminal* near/6 ill*) or terminal-stage* or dying or (close near/6 death)):ti,ab,kw	
#7.	(terminal* near/6 disease*):ti,ab,kw	
#8.	(end near/6 life):ti,ab,kw	
#9.	hospice*:ti,ab,kw	
#10.	("end-stage disease*" or "end stage disease*" or "end-stage illness" or "end stage"):ti,ab,kw	
#11.	advanced disease*:ti,ab,kw	
#12.	("incurable illness*" or "incurable disease*"):ti,ab,kw	
#13.	("advanced directive*" or "living will*" or "do-not-resuscitate order*"):ti,ab,kw	
#14.	{or #1- #13}	Population
#15.	MeSH descriptor: [fluid therapy] this term only	
#16.	MeSH descriptor: [dehydration] this term only	

#17.	(hydrat* or dehydrat* or rehydrat* or (fluid* near/6 therap*) or (fluid* near/6 balance*) or (fluid* near/6 manag*) or hypodermoclysis):ti,ab,kw
#18.	{or #15-#17} Intervention
#19.	#14 AND #18

Cinahl search terms

S1.	(MH "palliative care")
S2.	palliat*
S3.	(MH "terminally ill patients+")
S4.	(MH "terminal care+")
S5.	(terminal* n6 care*)
S6.	(terminal* n6 ill*)
S7.	(terminal* n6 disease*)
S8.	(end n3 life)
S9.	hospice*
S10.	("end-stage disease*" or "end stage disease* or end-stage illness" or "end stage")
S11.	"advanced disease*"
S12.	("incurable illness*" or "incurable disease*")
S13.	("advanced directive*" or "living will*" or "do-not-resuscitate order*")
S14.	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 Population
S15.	(MH "fluid therapy")
S16.	(MH "dehydration")
S17.	(hydrat* or dehydrat* or rehydrat*)
S18.	hypodermoclysis
S19.	(fluid* n6 therap*)
S20.	(fluid* n6 balance*)
S21.	(fluid* n6 manag*)
S22.	S15 or S16 or S17 or S18 or S19 or S20 or S21 Intervention
S23.	S14 and S22

A.2.5 Respiratory secretions

5. For people in the last days of life which pharmacological agents are most effective in treating troublesome respiratory secretions, and what degree of sedation do they cause?

We updated the Cochrane search strategy from the review: Wee B, Hillier R. Interventions for noisy breathing in patients near to death. Cochrane Database of Systematic Reviews 2008, Issue 1. Art. No.: CD005177. DOI: 10.1002/14651858.CD005177.pub2.

The search was conducted in Cochrane Central Register of Controlled Trials (CENTRAL) only; we expanded this by searching the Cochrane Database of Systematic Reviews (CDSR) and the Database of Reviews and Abstracts (DARE). We did not search the Cochrane Pain, Palliative & Supportive Care Trials Register as we did not have access. Where possible we added an exclusions filter and English language limit.

Medline search terms

1.	respiratory sounds/
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2.	bronchi/se [secretion]	
3.	lung/se [secretion]	
4.	(non-expectorated adj2 secretion*).tw.	
5.	(respiratory adj sound*).tw.	
6.	(respiration adj sound*).tw.	
7.	(respiration adj2 secretion*).tw.	
8.	(respiratory adj2 secretion*).tw.	
9.	(bronchial adj2 secretion*).tw.	
10.	(retained adj2 secretion*).tw.	
11.	(noisy adj2 respirat*).tw.	
12.	(noisy adj2 breath*).tw.	
13.	(death adj rattle*).tw.	
14.	(terminal adj2 breath*).tw.	
15.	((rattling adj2 breath*) or gasping breath*).tw.	
16.	(pulmonary adj secretion).tw.	
17.	((airway adj secretion) or airway receptor*).tw.	
18.	(glycopyrronium or hyoscine).tw.	
19.	(anticholinergic* adj drug*).tw.	
20.	(antimuscarinic* adj drug*).tw.	
21.	(anti-cholinergic* adj drug*).tw.	
22.	(anti-muscarinic* adj drug*).tw.	
23.	narcolep*.tw.	
24.	(sleep adj apnoea).tw.	
25.	(sleep adj apnea).tw.	
26.	sleep apnea, obstructive/	
27.	narcolepsy/	
28.	or/1-27	Intervention
29.	terminal care/	
30.	exp terminally ill/	
31.	palliative care/	
32.	hospice care/	
33.	(terminal* adj2 care).tw.	
34.	(terminal* adj2 ill*).tw.	
35.	palliat*.tw.	
36.	hospice*.tw.	
37.	((end adj stage adj ill*) or (end adj stage adj care) or (end adj stage adj life) or (end adj life)).tw.	
38.	(close adj2 death).tw.	
39.	(dying or death or (end adj2 life)).tw.	
40.	or/29-39	Population
41.	28 and 40	
42.	Excluded study designs and publication types limit A.1.4	
43.	41 not 42	
44.	Limit 43 to English language	

Embase search terms

1.	*bronchus/	
2.	*lung/	
3.	*abnormal respiratory sound/	
4.	(non-expectorated adj2 secretion*).tw.	
5.	(respiratory adj sound*).tw.	
6.	(respiration adj sound*).tw.	
7.	(respiration adj2 secretion*).tw.	
8.	(respiratory adj2 secretion*).tw.	
9.	(bronchial adj2 secretion*).tw.	
10.	(retained adj2 secretion*).tw.	
11.	(noisy adj2 respirat*).tw.	
12.	(noisy adj2 breath*).tw.	
13.	(death adj rattle*).tw.	
14.	(terminal adj2 breath*).tw.	
15.	((rattling adj2 breath*) or gasping breath*).tw.	
16.	(pulmonary adj secretion).tw.	
17.	((airway adj secretion) or airway receptor*).tw.	
18.	(glycopyrronium or hyoscine).tw.	
19.	(anticholinergic* adj drug*).tw.	
20.	(antimuscarinic* adj drug*).tw.	
21.	(anti-cholinergic* adj drug*).tw.	
22.	(anti-muscarinic* adj drug*).tw.	
23.	narcolep*.tw.	
24.	(sleep adj apnoea).tw.	
25.	(sleep adj apnea).tw.	
26.	*sleep disordered breathing/	
27.	*narcolepsy/	
28.	or/1-27	Intervention
29.	*terminal care/	
30.	*terminally ill patient/	
31.	*palliative therapy/	
32.	*hospice care/	
33.	(terminal* adj2 care).tw.	
34.	(terminal* adj2 ill*).tw.	
35.	palliat*.tw.	
36.	hospice*.tw.	
37.	((end adj stage adj ill*) or (end adj stage adj care) or (end adj stage adj life) or (end adj life)).tw.	
38.	(close adj2 death).tw.	
39.	(dying or death or (end adj2 life)).tw.	
40.	or/29-39	Population
41.	28 and 40	
42.	<i>Excluded study designs and publication types limit A.1.4</i>	
43.	41 not 42	
44.	Limit 43 to English language	

Cochrane search terms

#1.	MeSH descriptor: [respiratory sounds] explode all trees
#2.	MeSH descriptor: [bronchi] explode all trees
#3.	MeSH descriptor: [lung] explode all trees
#4.	(non-expectorated near/2 secretion*):ti,ab,kw
#5.	(respiratory next sound*):ti,ab,kw
#6.	(respiration next sound*):ti,ab,kw
#7.	(respiration near/2 secretion*):ti,ab,kw
#8.	(respiratory near/2 secretion*):ti,ab,kw
#9.	(bronchial near/2 secretion*):ti,ab,kw
#10.	(retained near/2 secretion*):ti,ab,kw
#11.	(noisy near/2 respirat*):ti,ab,kw
#12.	(noisy near/2 breath*):ti,ab,kw
#13.	(death next rattle*):ti,ab,kw
#14.	(terminal near/2 breath*):ti,ab,kw
#15.	((rattling near/2 breath*) or gasping breath*):ti,ab,kw
#16.	(pulmonary next secretion):ti,ab,kw
#17.	((airway next secretion) or airway receptor*):ti,ab,kw
#18.	(glycopyrronium or hyoscine):ti,ab,kw
#19.	(anticholinergic* next drug*):ti,ab,kw
#20.	(antimuscarinic* next drug*):ti,ab,kw
#21.	(anti-cholinergic* next drug*):ti,ab,kw
#22.	(anti-muscarinic* next drug*):ti,ab,kw
#23.	narcolep*:ti,ab,kw
#24.	(sleep next apnoea):ti,ab,kw
#25.	(sleep next apnea):ti,ab,kw
#26.	MeSH descriptor: [sleep apnea, obstructive] explode all trees
#27.	MeSH descriptor: [narcolepsy] explode all trees
#28.	{or #1- #27} Intervention
#29.	MeSH descriptor: [terminal care] explode all trees
#30.	MeSH descriptor: [terminally ill] explode all trees
#31.	MeSH descriptor: [palliative care] explode all trees
#32.	MeSH descriptor: [hospice care] explode all trees
#33.	(terminal* near/2 care):ti,ab,kw
#34.	(terminal* near/2 ill*):ti,ab,kw
#35.	palliat*:ti,ab,kw
#36.	hospice*:ti,ab,kw
#37.	((end next stage next ill*) or (end next stage next care) or (end next stage next life) or (end next life)):ti,ab,kw
#38.	(close near/2 death):ti,ab,kw
#39.	(dying or death or (end near/2 life)):ti,ab,kw
#40.	{or #29- #39} Population
#41.	#28 AND #39

Cinahl search terms

S1.	(MH "respiratory sounds")
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S2.	(MH "bronchi")	
S3.	(MH "lung")	
S4.	(non-expectorated n2 secretion*)	
S5.	(respiratory n1 sound*)	
S6.	(respiration n1 sound*)	
S7.	(respiration n2 secretion*)	
S8.	(respiratory n2 secretion*)	
S9.	(bronchial n2 secretion*)	
S10.	(retained n2 secretion*)	
S11.	(noisy n2 respirat*)	
S12.	(noisy n2 breath*)	
S13.	(death n1 rattle*)	
S14.	(terminal n2 breath*)	
S15.	(rattling n2 breath*) or gasping breath*	
S16.	(pulmonary n1 secretion)	
S17.	airway n1 secretion or airway receptor*	
S18.	glycopyrronium or hyoscine	
S19.	(anticholinergic* n1 drug*)	
S20.	(antimuscarinic* n1 drug*)	
S21.	(anti-cholinergic* n1 drug*)	
S22.	(anti-muscarinic* n1 drug*)	
S23.	narcolep*	
S24.	sleep n1 apnoea	
S25.	sleep n1 apnea	
S26.	(MH "sleep apnea, obstructive")	
S27.	(MH "narcolepsy")	
S28.	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 or S18 or S19 or S20 or S21 or S22 or S23 or S24 or S25 or S26 or S27	Intervention
S29.	(MH "terminal care")	
S30.	(MH "terminally ill patients")	
S31.	(MH "palliative care")	
S32.	(MH "hospice care")	
S33.	(terminal* n2 care)	
S34.	(terminal* n2 ill*)	
S35.	palliat*	
S36.	hospice*	
S37.	end n1 stage n1 ill* or end n1 stage n1 care	
S38.	end n1 stage n1 life or end n1 life	
S39.	dying or death or end n2 life	
S40.	(close n2 death)	
S41.	S29 or S30 or S31 or S32 or S33 or S34 or S35 or S36 or S37 or S38 or S39 or S40	Population
S42.	S28 AND S41	Limits: exclude Medline, Humans, English Language

A.2.6 Pharmacological management: Pain, anxiety, breathlessness and agitation

6. For people in the last days of life, which pharmacological agents are most effective in relieving pain, breathlessness, anxiety, agitation and delirium and what degree of sedation do they cause?

Medline search terms

1.	death/
2.	(dying or death).ti,ab.
3.	terminally ill/ or terminal care/ or palliative care/
4.	((terminal or palliati*) adj1 care).ti,kf.
5.	"terminally ill".ti,kf.
6.	"terminal illness".ti,kf.
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.
8.	(terminal adj1 phase*).ti,ab.
9.	"end of life".ti,ab.
10.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.
11.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.
12.	deathbed.ti,ab.
13.	or/1-12
	Population
14.	benzodiazepines/ or clonazepam/ or diazepam/ or lorazepam/ or midazolam/
15.	(benzodiazepine* or lorazepam or ativan or orfidal or midazolam or hypnovel or dormicum or versed or diazepam or rimapam or tensium or dialar or diastat or desitin or valium or valrelease or diazemuls or stesolid or clonazepam or rivotril or ravotril or rivatril or iktorivil or clonex or paxam or petril or naze or kriadex or linotril or clonotril or klonopin).ti,ab.
16.	analgesics, opioid/
17.	buprenorphine/ or fentanyl/ or oxycodone/ or opium/ or alfentanil/ or heroin/ or morphine/
18.	(morphine or oramorph or sevredol or morphgesic or "mst continus" or zomorph or "mxl" or minijet or cyclimorph or filnarine or astramorph or duramorph or infumorph or "ms contin" or roxanol or "rms suppository").ti,ab.
19.	(oxycodone or oxynorm or oxycontin or dolocodon or longtec or targinact or endocone or oxydose or oxyfast or oxylr or percolone or dazidox or roxicodone or oxecta or endone or percocet).ti,ab.
20.	(fentanyl or sublimaze or abstral or effentora or recivit or actiq or instanyl or pecfent or fencino or fentalis or matrifen or mexolar or opioidur or osmanil or tilofyl or victanyl or durogesic or duragesic or onsolis or haldid or fentora or dtrans or lazanda or alfentanil or alfenta or rapifen or buprenorphine or temgesic or butrans or transtec or buprenex or norspan or hapoctasin or transtec or subutex or diamorphine).ti,ab.
21.	antipsychotic agents/
22.	haloperidol/ or levomepromazine/ or chlorpromazine/
23.	(haloperidol or haloperidon or dozic or haldol or serenace).ti,ab.
24.	(levomepromazine or nozinan or nosinan or levoprome).ti,ab.
25.	(olanzapine or zyprexa or zalasta or zypadhera or velotab or lanzek or oleanz).ti,ab.
26.	(chlorpromazine or chloractil or largactil or thorazine or megaphen or promapar).ti,ab.
27.	exp histamine antagonists/
28.	(antihistamine* or anti-histamine* or (histimine* adj antagonist*)).ti,ab.
29.	prednisolone/ or dexamethasone/
30.	(prednisolone or methylprednisolone or prednisone or dexamethasone or depo-medrone or solu-medrone or medrone or dexsol or martapan or deltacortril or decadron or organon or hospira or predfoam or predsol or predemena).ti,ab.

31.	furosemide/	
32.	(furosemide or frusemide or rusyde or frusol or lasix).ti,ab.	
33.	exp oxygen/	
34.	(oxygen or heliox).ti,ab.	
35.	or/14-34	Intervention
36.	13 and 35	
37.	Randomised controlled trials search studies filter A.1.2	
38.	Systematic reviews search filter A.1.1	
39.	37 or 38	
40.	36 and 39	
41.	Excluded study designs and publication types limit A.1.4	
42.	40 not 41	
43.	Limit 42 to English language	

Embase search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill patient/ or terminal care/ or palliative therapy/	
4.	((terminal or palliati*) adj1 care).ti,kw.	
5.	"terminally ill".ti,kw.	
6.	"terminal illness".ti,kw.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or stage* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shut* down or shutdown or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	*clonazepam/ or *diazepam/ or *lorazepam/ or *midazolam/	
15.	*benzodiazepine/	
16.	(benzodiazepine* or lorazepam or ativan or orfidal or midazolam or hypnovel or dormicum or versed or diazepam or rimapam or tensium or dialar or diastat or desitin or valium or valrelease or diazemuls or stesolid or clonazepam or rivotril or ravotril or rivatril or iktorivil or clonex or paxam or petril or naze or kriadex or linotril or clonotril or klonopin).ti,ab.	
17.	*opiate/ or *narcotic analgesic agent/	
18.	*buprenorphine/ or *fentanyl/ or *oxycodone/ or *alfentanil/ or *diamorphine/ or *morphine/	
19.	(morphine or oramorph or sevredol or morphgesic or "mst continus" or zomorph or "mxl" or minijet or cyclimorph or filnarine or astramorph or duramorph or infumorph or "ms contin" or roxanol or "rms suppository").ti,ab.	
20.	(oxycodone or oxynorm or oxycontin or dolocodon or longtec or targinact or endocone or oxydose or oxyfast or oxylr or percolone or dazidox or roxicodone or oxecta or endone or percocet).ti,ab.	
21.	(fentanyl or sublimaze or abstral or effentora or recivit or actiq or instanyl or pecfent or fencino or fentalis or matrifen or mexolar or opioidur or osmanil or tilofyl or victanyl or durogesic or duragesic or onsolis or haldid or fentora or dtrans or lazanda or alfentanil or alfenta or rapifen or buprenorphine or temgesic or butrans or transtec or buprenex or norspan	

	or hapoctasin or transtec or subutex or diamorphine).ti,ab.
22.	*neuroleptic agent/
23.	*haloperidol/ or *levomepromazine/ or *chlorpromazine/
24.	(haloperidol or haloperidon or dozic or haldol or serenace).ti,ab.
25.	(levomepromazine or nozinan or nosinan or levoprome).ti,ab.
26.	(olanzapine or zyprexa or zalasta or zypadhera or velotab or lanzek or oleanz).ti,ab.
27.	(chlorpromazine or chloractil or largactil or thorazine or megaphen or promapar).ti,ab.
28.	exp *antihistaminic agent/
29.	(antihistamine* or anti-histamine* or (histimine* adj antagonist*)).ti,ab.
30.	*prednisolone/ or *dexamethasone/
31.	(prednisolone or methylprednisolone or prednisone or dexamethasone or depo-medrone or solu-medrone or medrone or dexsol or martapan or deltacortril or decadron or organon or hospira or predfoam or predsol or predemena).ti,ab.
32.	*furosemide/
33.	(furosemide or frusemide or rusyde or frusol or lasix).ti,ab.
34.	exp *oxygen/
35.	(oxygen or heliox).ti,ab.
36.	or/14-35
	Population
37.	13 and 36
38.	Randomised controlled trials search studies filter A.1.2
39.	Systematic reviews search filter A.1.1
40.	38 or 39
41.	37 and 40
42.	Excluded study designs and publication types limit A.1.4
43.	41 not 42
44.	Limit 43 to English language

Cochrane search terms

#1.	MeSH descriptor: [terminally ill] explode all trees
#2.	MeSH descriptor: [terminal care] explode all trees
#3.	MeSH descriptor: [palliative care] explode all trees
#4.	MeSH descriptor: [death] explode all trees
#5.	((palliati* or terminal or end) near/1 stage*):ti,ab,kw
#6.	((terminal or palliati*) near/1 care):ti,ab,kw
#7.	(dying or death):ti,ab,kw
#8.	terminally ill:ti,ab,kw
#9.	terminal illness:ti,ab,kw
#10.	(terminal near/1 phase*):ti,ab,kw
#11.	end of life:ti,ab,kw
#12.	((last or final) near/1 (hour* or day* or minute* or stage* or week* or month* or moment*)):ti,ab,kw
#13.	(body near/2 (shutdown or shut* down or deteriorat*)):ti,ab,kw
#14.	deathbed:ti,ab,kw
#15.	{or #1-#14}
	Population
#16.	MeSH descriptor: [benzodiazepines] explode all trees
#17.	MeSH descriptor: [diazepam] explode all trees

#18.	MeSH descriptor: [clonazepam] explode all trees	
#19.	MeSH descriptor: [lorazepam] explode all trees	
#20.	MeSH descriptor: [midazolam] explode all trees	
#21.	(benzodiazepine* or lorazepam or ativan or orfidal or midazolam or hypnovel or dormicum or versed or diazepam or rimapam or tensium or dialar or diastat or desitin or valium or valrelease or diazemuls or stesolid or clonazepam or rivotril or ravotril or rivatril or iktorivil or clonex or paxam or petril or naze or kriadex or linotril or clonotril or klonopin):ti,ab	
#22.	MeSH descriptor: [analgesics, opioid] explode all trees	
#23.	MeSH descriptor: [buprenorphine] explode all trees	
#24.	MeSH descriptor: [fentanyl] explode all trees	
#25.	MeSH descriptor: [oxycodone] explode all trees	
#26.	MeSH descriptor: [opium] explode all trees	
#27.	MeSH descriptor: [alfentanil] explode all trees	
#28.	MeSH descriptor: [heroin] explode all trees	
#29.	MeSH descriptor: [morphine derivatives] explode all trees	
#30.	(morphine or oramorph or sevredol or morphgesic or "mst continus" or zomorph or "mxl" or minijet or cyclimorph or filnarine or astramorph or duramorph or infumorph or "ms contin" or roxanol or "rms suppository"):ti,ab	
#31.	(oxycodone or oxynorm or oxycontin or dolocodon or longtec or targinact or endocone or oxydose or oxyfast or oxylr or percolone or dazidox or roxicodone or oxecta or endone or percocet):ti,ab	
#32.	(fentanyl or sublimaze or abstral or effentora or recivit or actiq or instanyl or pecfent or fencino or fentalis or matrifen or mexolar or opiodur or osmanil or tilofyl or victanyl or durogesic or duragesic or onsolis or haldid or fentora or dtrans or lazanda or alfentanil or alfenta or rapifen or buprenorphine or temgesic or butrans or transtec or buprenex or norspan or hapoctasin or transtec or subutex or diamorphine):ti,ab	
#33.	MeSH descriptor: [antipsychotic agents] explode all trees	
#34.	MeSH descriptor: [haloperidol] explode all trees	
#35.	MeSH descriptor: [methotrimeprazine] explode all trees	
#36.	MeSH descriptor: [chlorpromazine] explode all trees	
#37.	(haloperidol or haloperidon or dozic or haldol or serenace):ti,ab	
#38.	(levomepromazine or nozinan or nosinan or levoprome):ti,ab	
#39.	(olanzapine or zyprexa or zalasta or zypadhera or velotab or lanzek or oleanz):ti,ab	
#40.	(chlorpromazine or chloractil or largactil or thorazine or megaphen or promapar):ti,ab	
#41.	MeSH descriptor: [histamine antagonists] explode all trees	
#42.	(antihistamine* or anti-histamine* or (histimine* next antagonist*)):ti,ab	
#43.	MeSH descriptor: [prednisolone] explode all trees	
#44.	MeSH descriptor: [dexamethasone] explode all trees	
#45.	(prednisolone or methylprednisolone or prednisone or dexamethasone or depo-medrone or solu-medrone or medrone or dexsol or martapan or deltacortril or decadron or organon or hospira or predfoam or predsol or predemena):ti,ab	
#46.	MeSH descriptor: [furosemide] explode all trees	
#47.	(furosemide or frusemide or rusyde or frusol or lasix) .ti,ab.	
#48.	MeSH descriptor: [oxygen] explode all trees	
#49.	(oxygen or heliox):ti,ab	
#50.	{or #16-49}	Intervention
#51.	#15 and #50	

A.2.7 Pharmacological management: Nausea and vomiting

7. For people in the last days of life, which pharmacological agents are most effective in relieving nausea and vomiting and what degree of sedation do they cause?

Medline search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill/ or terminal care/ or palliative care/	
4.	((terminal or palliati*) adj1 care).ti,kf.	
5.	"terminally ill".ti,kf.	
6.	"terminal illness".ti,kf.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	cyclizine/	
15.	histamine h1 antagonists/	
16.	(cyclizine or valoid or marezine).ti,ab.	
17.	exp antiemetics/	
18.	(antiemetic* or anti emetic*).ti,ab.	
19.	dexamethasone/	
20.	dexamethasone.ti,ab.	
21.	octreotide/	
22.	octreotide.ti,ab.	
23.	metoclopramide/	
24.	(metoclopramide or maxolon).ti,ab.	
25.	domperidone/	
26.	(domperidone or motilium).ti,ab.	
27.	haloperidol/	
28.	(haloperidol or doxic or haldol or serenace).ti,ab.	
29.	methotrimeprazine/	
30.	(levomepromazine or nozinan).ti,ab.	
31.	(palonosetron or aloxi).ti,ab.	
32.	ondansetron/	
33.	(ondansetron or zofran).ti,ab.	
34.	granisetron/	
35.	(granisetron or kytril or sancruso).ti,ab.	
36.	(aprepitant or emend).ti,ab.	
37.	neurokinin-1 receptor antagonists/	
38.	(fosaprepitant or ivemend).ti,ab.	
39.	(olanzapine or zyprexa).ti,ab.	
40.	prochlorperazine/	
41.	(prochlorperazine or stemetil or buccastem).ti,ab.	

42.	glycopyrrolate/	
43.	((hyoscine adj1 butylbromide) or hyrdobromide).ti,ab.	
44.	muscarinic antagonists/	
45.	(glycopyrrolate or glycopyrronium).ti,ab.	
46.	haloperidol.ti,ab.	
47.	methotrimeprazine.ti,ab.	
48.	or/14-47	Intervention
49.	13 and 48	
50.	Randomised controlled trials search studies filter A.1.2	
51.	Systematic reviews search filter A.1.1	
52.	50 or 51	
53.	49 and 52	
54.	Excluded study designs and publication types limit A.1.4	
55.	53 not 54	
56.	Limit 55 to English language	

Embase search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill patient/ or terminal care/ or palliative therapy/	
4.	((terminal or palliati*) adj1 care).ti,kw.	
5.	"terminally ill".ti,kw.	
6.	"terminal illness".ti,kw.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or stage* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shut* down or shutdown or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	*cyclizine/	
15.	*histamine h1 receptor antagonist/	
16.	(cyclizine or valoid or marezine).ti,ab.	
17.	exp *antiemetic agent/	
18.	(antiemetic* or anti emetic*).ti,ab.	
19.	*dexamethasone/	
20.	dexamethasone.ti,ab.	
21.	*octreotide/	
22.	octreotide.ti,ab.	
23.	octreotide.ti,ab.	
24.	*metoclopramide/	
25.	(metoclopramide or maxolon).ti,ab.	
26.	*domperidone/	
27.	(domperidone or motilium).ti,ab.	
28.	*haloperidol/	

29.	(haloperidon or dozic or haldol or serenace).ti,ab.	
30.	*methotrimeprazine/	
31.	(levomepromazine or nozinan).ti,ab.	
32.	(palonosetron or aloxi).ti,ab.	
33.	*ondansetron/	
34.	(ondansetron or zofran).ti,ab.	
35.	*granisetron/	
36.	(granisetron or kytril or sancruso).ti,ab.	
37.	*aprepitant/	
38.	(aprepitant or emend).ti,ab.	
39.	*fosaprepitant/	
40.	(fosaprepitant or ivemend).ti,ab.	
41.	*olanzapine/	
42.	(olanzapine or zyprexa).ti,ab.	
43.	*prochlorperazine/	
44.	(prochlorperazine or stemetil or buccastem).ti,ab.	
45.	glycopyrrolate/	
46.	((hyoscine adj1 butylbromide) or hyrdobromide).ti,ab.	
47.	muscarinic antagonists/	
48.	(glycopyrrolate or glycopyrronium).ti,ab.	
49.	haloperidol.ti,ab.	
50.	methotrimeprazine.ti,ab.	
51.	or/14-50	Intervention
52.	13 and 51	
53.	Randomised controlled trials search studies filter A.1.2	
54.	Systematic reviews search filter A.1.1	
55.	53 or 54	
56.	52 and 55	
57.	Excluded study designs and publication types limit A.1.4	
58.	56 not 57	
59.	Limit 58 to English language	

Cochrane search terms

#1.	MeSH descriptor: [terminally ill] explode all trees
#2.	MeSH descriptor: [terminal care] explode all trees
#3.	MeSH descriptor: [palliative care] explode all trees
#4.	MeSH descriptor: [death] explode all trees
#5.	((palliati* or terminal or end) near/1 stage*):ti,ab,kw
#6.	((terminal or palliati*) near/1 care):ti,ab,kw
#7.	(dying or death):ti,ab,kw
#8.	terminally ill:ti,ab,kw
#9.	terminal illness:ti,ab,kw
#10.	(terminal near/1 phase*):ti,ab,kw
#11.	end of life:ti,ab,kw
#12.	((last or final) near/1 (hour* or day* or minute* or stage* or week* or month* or moment*)):ti,ab,kw

#13.	(body near/2 (shutdown or shut* down or deteriorat*)):ti,ab,kw	
#14.	deathbed:ti,ab,kw	
#15.	{or #1-#14}	Population
#16.	MeSH descriptor: [cyclizine] explode all trees	
#17.	MeSH descriptor: [histamine h1 antagonists] explode all trees	
#18.	(cyclizine or valoid or marezine):ti,ab	
#19.	MeSH descriptor: [antiemetics] explode all trees	
#20.	(antiemetic* or anti emetic*):ti,ab	
#21.	MeSH descriptor: [dexamethasone] explode all trees	
#22.	dexamethasone:ti,ab	
#23.	MeSH descriptor: [octreotide] explode all trees	
#24.	octreotide:ti,ab	
#25.	MeSH descriptor: [metoclopramide] explode all trees	
#26.	(metoclopramide or maxolon):ti,ab	
#27.	MeSH descriptor: [domperidone] explode all trees	
#28.	(domperidone or motilium):ti,ab	
#29.	MeSH descriptor: [haloperidol] explode all trees	
#30.	(haloperidon or dozic or haldol or serenace):ti,ab	
#31.	MeSH descriptor: [methotrimeprazine] explode all trees	
#32.	(levomepromazine or nozinan):ti,ab	
#33.	(palonosetron or aloxi):ti,ab	
#34.	MeSH descriptor: [ondansetron] explode all trees	
#35.	(ondansetron or zofran):ti,ab	
#36.	MeSH descriptor: [granisetron] explode all trees	
#37.	(granisetron or kytril or sancruso):ti,ab	
#38.	MeSH descriptor: [neurokinin-1 receptor antagonists] explode all trees	
#39.	(aprepitant or emend):ti,ab	
#40.	(fosaprepitant or ivemend):ti,ab	
#41.	MeSH descriptor: [prochlorperazine] explode all trees	
#42.	(prochlorperazine or stemetil or buccastem) .ti,ab.	
#43.	MeSH descriptor: [glycopyrrolate] this term only	
#44.	((hyoscine near/1 butylbromide) or hyrdobromide):ti,ab	
#45.	MeSH descriptor: [muscarinic antagonists] this term only	
#46.	(glycopyrrolate or glycopyrronium):ti,ab	
#47.	haloperidol:ti,ab	
#48.	methotrimeprazine:ti,ab	
#49.	MeSH descriptor: [cyclizine] explode all trees	
#50.	MeSH descriptor: [histamine h1 antagonists] explode all trees	
#51.	{or #16-#50}	Intervention
#52.	#15 and #51	

A.2.8 Anticipatory prescribing

8. What are the experiences, opinions and attitudes of healthcare professionals, the dying person and those important to them regarding o access to anticipatory prescribing?

9. How effective is anticipatory prescribing at improving comfort in adults in the last days of life compared with prescribing at the bed side?

Medline search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill/ or terminal care/ or palliative care/	
4.	((terminal or palliati*) adj1 care).ti,kf.	
5.	"terminally ill".ti,kf.	
6.	"terminal illness".ti,kf.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	(prescrib* or prescription* or medicat* or medicine* or drug* or pharma or pharmaceutical* or packet* or pack* or pak* or box* or kit*).ti,ab.	
15.	(crisis* or comfort* or anticipate* or anticipatory or anticipation or preemptive or pre-emptive).ti,ab.	
16.	14 and 15	
17.	just in case.ti,ab.	
18.	16 or 17	Intervention
19.	13 and 18	
20.	Excluded study designs and publication types limit A.1.4	
21.	19 not 20	
22.	Limit 21 to English language	

Embase search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill patient/ or terminal care/ or palliative therapy/	
4.	((terminal or palliati*) adj1 care).ti,kw.	
5.	"terminally ill".ti,kw.	
6.	"terminal illness".ti,kw.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or stage* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shut* down or shutdown or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	(prescrib* or prescription* or medicat* or medicine* or drug* or pharma or pharmaceutical* or packet* or pack* or pak* or box* or kit*).ti,ab.	

15.	(crisis* or comfort* or anticipate* or anticipatory or anticipation or preemptive or preemptive).ti,ab.	
16.	14 and 15	
17.	just in case.ti,ab.	
18.	16 or 17	Intervention
19.	13 and 18	
20.	Excluded study designs and publication types limit A.1.4	
21.	19 not 20	
22.	Limit 21 to English language	

Cochrane search terms

#1.	MeSH descriptor: [terminally ill] explode all trees	
#2.	MeSH descriptor: [terminal care] explode all trees	
#3.	MeSH descriptor: [palliative care] explode all trees	
#4.	MeSH descriptor: [death] explode all trees	
#5.	((palliati* or terminal or end) near/1 stage*):ti,ab,kw	
#6.	((terminal or palliati*) near/1 care):ti,ab,kw	
#7.	(dying or death):ti,ab,kw	
#8.	terminally ill:ti,ab,kw	
#9.	terminal illness:ti,ab,kw	
#10.	(terminal near/1 phase*):ti,ab,kw	
#11.	end of life:ti,ab,kw	
#12.	((last or final) near/1 (hour* or day* or minute* or stage* or week* or month* or moment*)):ti,ab,kw	
#13.	(body near/2 (shutdown or shut* down or deteriorat*)):ti,ab,kw	
#14.	deathbed:ti,ab,kw	
#15.	{or #1-#14}	Population
#16.	(prescrib* or prescription* or medicat* or medicine* or drug* or pharma or pharmaceutical* or packet* or pack* or pak* or box* or kit*):ti,ab	
#17.	(crisis* or comfort* or anticipate* or anticipatory or anticipation or preemptive or preemptive).ti,ab	
#18.	#16 and #17	
#19.	just in case:ti,ab	
#20.	#18 or #19	Intervention
#21.	#15 and #20	

Cinahl search terms

S1.	(MH "death"# or #MH "terminally ill patients"# or #MH "terminal care"# or #MH "palliative care"#
S2.	(dying or death)
S3.	((terminal or palliati*) n1 care)
S4.	terminally ill or terminal illness
S5.	((palliati* or terminal or end) n1 stage*)
S6.	(terminal n1 phase*)
S7.	end of life
S8.	((last or final) n1 (hour* or day* or minute* or week* or month* or moment*))

S9.	(body n2 (shutdown or shut* down or deteriorat*))	
S10.	deathbed	
S11.	S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10	Population
S12.	prescrib* or prescription* or medicat* or medicine* or drug* or pharma or pharmaceutical* or packet* or pack* or pak* or box* or kit*	
S13.	crisis* or comfort* or anticipate* or anticipatory or anticipation or preemptive or pre-emptive	
S14.	S12 and S13	
S15.	just in case	
S16.	S14 or S15	Intervention
S17.	S11 and S16	Limits: exclude Medline, Humans, English Language

A.3 Health economics search

A.3.1 Health economic reviews

Economic searches were conducted in Medline, Embase, HEED and CRD for NHS EED and HTA.

Medline search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill/ or terminal care/ or palliative care/	
4.	((terminal or palliati*) adj1 care).ti,kf.	
5.	"terminally ill".ti,kf.	
6.	"terminal illness".ti,kf.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	Health economics study designs filter A.1.3	
15.	13 and 14	
16.	Excluded study designs and publication types limit A.1.4	
17.	15 not 16	
18.	Limit 17 to English language	

Embase search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill patient/ or terminal care/ or palliative therapy/	
4.	((terminal or palliati*) adj1 care).ti,kw.	
5.	"terminally ill".ti,kw.	
6.	"terminal illness".ti,kw.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	

8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or stage* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shut* down or shutdown or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	Health economics study designs filter A.1.3	
15.	13 and 14	
16.	Excluded study designs and publication types limit A.1.4	
17.	15 not 16	
18.	Limit 17 to English language	

CRD search terms

#1.	(end of life) IN NHSEED, HTA	
#2.	((last or final) adj1 (hour* or days* or minute* or stage* or week* or month*)) IN NHSEED, HTA	
#3.	((dying or terminal) adj1 phase*) IN NHSEED, HTA	
#4.	((dying or terminal or end) adj1 stage*) IN NHSEED, HTA	
#5.	((dying adj2 (actively or begin* or begun))) IN NHSEED, HTA	
#6.	((death or dying) adj2 (approach* or imminent* or impending or near* or close* or throes)) IN NHSEED, HTA	
#7.	((Body adj2 (shut down or shutting down or deteriorat*))) IN NHSEED, HTA	
#8.	(deathbed) IN NHSEED, HTA	
#9.	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 IN NHSEED, HTA	Population

HEED search terms

1.	AX=end AND of AND life	
2.	AX=last or final	
3.	AX=hour* or days* or minute* or stage* or week* or month*	
4.	CS=2 and 3	
5.	AX=dying or terminal AND phase*	
6.	AX=dying or terminal or end AND stage*	
7.	AX=dying AND actively or begin* or begun	
8.	AX=death or dying	
9.	AX=approach* or imminent* or impending or near* or close* or throes	
10.	CS=8 and 9	
11.	AX=shut AND down or shutting AND down or deteriorat*	
12.	AX=body	
13.	CS=13 and 14	
14.	AX=deathbed	
15.	CS=1 or 4 or 5 or 6 or 7 or 10 or 13 or 14	Population
16.	JD=1999 or 2000 OR 2001 OR 2002 OR 2003 OR 2004 OR 2005 OR 2006 or 2007 or 2008 or 2009 or 2010 OR 2011 OR 2012 OR 2013 OR 2014	
17.	CS=15 and 16	

A.4 Minimally Important differences

Medline search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill/ or terminal care/ or palliative care/	
4.	((terminal or palliati*) adj1 care).ti,kf.	
5.	"terminally ill".ti,kf.	
6.	"terminal illness".ti,kf.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shutdown or shut* down or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	((minimal* or minimum or clinical*) adj3 (importan* or significan*) adj3 (differen* or change* or effect or finding* or increas* or decreas* or reduction*)).ti,ab.	MID terms
15.	13 and 14	
16.	<i>Excluded study designs and publication types limit A.1.4</i>	
17.	15 not 16	
18.	Limit 17 to English language	

Embase search terms

1.	death/	
2.	(dying or death).ti,ab.	
3.	terminally ill patient/ or terminal care/ or palliative therapy/	
4.	((terminal or palliati*) adj1 care).ti,kw.	
5.	"terminally ill".ti,kw.	
6.	"terminal illness".ti,kw.	
7.	((palliati* or terminal or end) adj1 stage*).ti,ab.	
8.	(terminal adj1 phase*).ti,ab.	
9.	"end of life".ti,ab.	
10.	((last or final) adj1 (hour* or day* or minute* or stage* or week* or month* or moment*)).ti,ab.	
11.	(body adj2 (shut* down or shutdown or deteriorat*)).ti,ab.	
12.	deathbed.ti,ab.	
13.	or/1-12	Population
14.	((minimal* or minimum or clinical*) adj3 (importan* or significan*) adj3 (differen* or change* or effect or finding* or increas* or decreas* or reduction*)).ti,ab.	MID terms
15.	13 and 14	
16.	<i>Excluded study designs and publication types limit A.1.4</i>	
17.	15 not 16	
18.	Limit 17 to English language	

A.5 References

[Unformat citations and delete this section when the search appendix is merged into a larger appendix document]