

Cystic Fibrosis: diagnosis and management

Appendix E

Main Appendix Document

Combined search strategies

9 March 2017

Draft for Consultation

*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/or their guardian or carer.

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Appendices

Appendix E: Combined search strategies

The results of the searches for the management strategies (E8 to E12) informed individual two-by-two comparisons as well as the search results for the network meta-analysis. After carrying out individual searches, all searches were combined into one database. However an overall network search is not provided separately, as all details are already included in the individual strategies.

E.1 In infants, children, young people and adults (including those that have undergone newborn screening) when should cystic fibrosis be suspected?

E.1.1 Database: Medline

Last searched on Ovid MEDLINE(R) 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	*CYSTIC FIBROSIS/ and exp *DIAGNOSIS/
2	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 diag\$).ti,ab.
3	*CYSTIC FIBROSIS/di [Diagnosis]
4	or/1-3
5	exp *"SIGNS AND SYMPTOMS, RESPIRATORY"/
6	(symptom\$ adj3 respirat\$).ti,ab.
7	((Chronic\$ or recur\$) adj5 (lung adj3 infection?)).ti,ab.
8	exp PNEUMONIA/
9	pneumoni\$.ti,ab.
10	(inflamm\$ adj3 (lung? or pulmonary)).ti,ab.
11	exp *RESPIRATORY TRACT DISEASES/ and CHRONIC DISEASE/
12	(chronic\$ adj3 respirat\$).ti,ab.
13	((Recurr\$ or chronic\$) adj2 cough\$).ti,ab.
14	FAILURE TO THRIVE/
15	GROWTH DISORDERS/
16	MALNUTRITION/
17	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti,ab.
18	((grow\$ or weight or height or length) adj3 (disorder? or deficien\$ or poor\$ or retard\$ or restrict\$)).ti,ab.
19	(malnutrition\$ or underweight? or under weight? or wasting or stunting or stunted).ti,ab.
20	exp "SIGNS AND SYMPTOMS, DIGESTIVE"/
21	exp MALABSORPTION SYNDROMES/
22	INTESTINAL ABSORPTION/
23	malabsorption.ti,ab.
24	(Blind Loop Syndrome or C?eliac Disease or Sprue or Lactose Intoleran\$ or Short Bowel Syndrome or Steatorrhea or Whipple Disease).ti,ab.
25	INFERTILITY, MALE/
26	((Infertil\$ or Steril\$ or sub-fertil\$ or subfertil\$) adj10 (male? or men)).ti,ab.
27	(Aspermia or Asthenozoospermia or Azoospermia or Oligospermia or Sertoli Cell-Only

#	Searches
	Syndrome).ti,ab.
28	exp PANCREATITIS/
29	pancreatitis.ti,ab.
30	MECONIUM/
31	Meconium ileus.ti,ab.
32	or/5-31
33	4 and 32
34	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 (doubt\$ or problem?)).ti,ab.
35	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 symptom?).ti,ab.
36	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (sign? adj3 symptom?).ti,ab.
37	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Symptom? adj3 progress\$).ti,ab.
38	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 (Clinical adj2 (characteristic\$ or manifest\$)).ti,ab.
39	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 Atypical presentation?).ti,ab.
40	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 suspect\$.ti,ab.
41	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ("no screen\$" or "not screen\$" or unscreen\$ or "no test\$" or "not test\$").ti,ab.
42	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ((miss\$ or never) adj3 (screen\$ or test\$)).ti,ab.
43	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 (present\$ or manifest\$).ti,ab.
44	diagnos\$.ab. /freq=2
45	43 and 44
46	CYSTIC FIBROSIS/
47	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
48	mucov\$.ti,ab.
49	or/46-48
50	DELAYED DIAGNOSIS/
51	*DIAGNOSTIC ERRORS/
52	or/50-51
53	49 and 52
54	33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 45 or 53
55	limit 54 to english language
56	LETTER/
57	EDITORIAL/
58	NEWS/
59	exp HISTORICAL ARTICLE/
60	ANECDOTES AS TOPIC/
61	COMMENT/
62	CASE REPORT/
63	(letter or comment*).ti.
64	or/56-63
65	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.

#	Searches
66	64 not 65
67	ANIMALS/ not HUMANS/
68	exp ANIMALS, LABORATORY/
69	exp ANIMAL EXPERIMENTATION/
70	exp MODELS, ANIMAL/
71	exp RODENTIA/
72	(rat or rats or mouse or mice).ti.
73	or/66-72
74	55 not 73

E.1.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations January 04, 2017 on 5th January 2017.

#	Searches
1	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 diag\$).ti,ab.
2	(symptom\$ adj3 respirat\$).ti,ab.
3	((Chronic\$ or recur\$) adj5 (lung adj3 infection?)).ti,ab.
4	pneumoni\$.ti,ab.
5	(inflamm\$ adj3 (lung? or pulmonary)).ti,ab.
6	(chronic\$ adj3 respirat\$).ti,ab.
7	((Recurr\$ or chronic\$) adj2 cough\$).ti,ab.
8	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti,ab.
9	((grow\$ or weight or height or length) adj3 (disorder? or deficien\$ or poor\$ or retard\$ or restrict\$)).ti,ab.
10	(malnutrition\$ or underweight? or under weight? or wasting or stunting or stunted).ti,ab.
11	malabsorption.ti,ab.
12	(Blind Loop Syndrome or C?eliac Disease or Sprue or Lactose Intoleran\$ or Short Bowel Syndrome or Steatorrhea or Whipple Disease).ti,ab.
13	((Infertil\$ or Steril\$ or sub-fertil\$ or subfertil\$) adj10 (male? or men)).ti,ab.
14	(Aspermia or Asthenozoospermia or Azoospermia or Oligospermia or Sertoli Cell-Only Syndrome).ti,ab.
15	pancreatitis.ti,ab.
16	Meconium ileus.ti,ab.
17	or/2-16
18	1 and 17
19	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 (doubt\$ or problem?)).ti,ab.
20	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 symptom?)).ti,ab.
21	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (sign? adj3 symptom?)).ti,ab.
22	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Symptom? adj3 progress\$)).ti,ab.
23	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 (Clinical adj2 (characteristic\$ or manifest\$)).ti,ab.
24	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 Atypical presentation?).ti,ab.

#	Searches
25	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 suspect\$.ti,ab.
26	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ("no screen\$" or "not screen\$" or unscreen\$ or "no test\$" or "not test\$").ti,ab.
27	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ((miss\$ or never) adj3 (screen\$ or test\$)).ti,ab.
28	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 (present\$ or manifest\$).ti,ab.
29	diagnos\$.ab. /freq=2
30	28 and 29
31	18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 30

E.1.3 Database: Cochrane Central Register of Controlled Trials

Last searched on EBM Reviews - Cochrane Central Register of Controlled Trials November 2016 on 10th January 2017.

#	Searches
1	*CYSTIC FIBROSIS/ and exp *DIAGNOSIS/
2	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 diag\$.ti,ab.
3	*CYSTIC FIBROSIS/di [Diagnosis]
4	or/1-3
5	exp *"SIGNS AND SYMPTOMS, RESPIRATORY"/
6	(symptom\$ adj3 respirat\$.ti,ab.
7	((Chronic\$ or recur\$) adj5 (lung adj3 infection?)).ti,ab.
8	exp PNEUMONIA/
9	pneumoni\$.ti,ab,kw.
10	(inflamm\$ adj3 (lung? or pulmonary)).ti,ab.
11	exp *RESPIRATORY TRACT DISEASES/ and CHRONIC DISEASE/
12	(chronic\$ adj3 respirat\$.ti,ab.
13	((Recurr\$ or chronic\$) adj2 cough\$.ti,ab.
14	FAILURE TO THRIVE/
15	GROWTH DISORDERS/
16	MALNUTRITION/
17	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti,ab.
18	((grow\$ or weight or height or length) adj3 (disorder? or deficien\$ or poor\$ or retard\$ or restrict\$)).ti,ab.
19	(malnutrition\$ or underweight? or under weight? or wasting or stunting or stunted).ti,ab,kw.
20	exp "SIGNS AND SYMPTOMS, DIGESTIVE"/
21	exp MALABSORPTION SYNDROMES/
22	INTESTINAL ABSORPTION/
23	malabsorption.ti,ab.
24	(Blind Loop Syndrome or C?eliac Disease or Sprue or Lactose Intoleran\$ or Short Bowel Syndrome or Steatorrhea or Whipple Disease).ti,ab,kw.
25	INFERTILITY, MALE/
26	((Infertil\$ or Steril\$ or sub-fertil\$ or subfertil\$) adj10 (male? or men)).ti,ab.
27	(Aspermia or Asthenozoospermia or Azoospermia or Oligospermia or Sertoli Cell-Only Syndrome).ti,ab,kw.
28	exp PANCREATITIS/

#	Searches
29	pancreatitis.ti,ab,kw.
30	MECONIUM/
31	Meconium ileus.ti,ab,kw.
32	or/5-31
33	4 and 32
34	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 (doubt\$ or problem?)).ti,ab.
35	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 symptom?)).ti,ab.
36	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (sign? adj3 symptom?)).ti,ab.
37	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Symptom? adj3 progress\$)).ti,ab.
38	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 (Clinical adj2 (characteristic\$ or manifest\$)).ti,ab.
39	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 Atypical presentation?).ti,ab.
40	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 suspect\$).ti,ab.
41	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 unscreen\$).ti,ab.
42	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ((miss\$ or never) adj3 (screen\$ or test\$)).ti,ab.
43	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 (present\$ or manifest\$)).ti,ab.
44	diagnos\$.ab. /freq=2
45	43 and 44
46	CYSTIC FIBROSIS/
47	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
48	mucov\$.ti,ab.
49	or/46-48
50	DELAYED DIAGNOSIS/
51	*DIAGNOSTIC ERRORS/
52	or/50-51
53	49 and 52
54	33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 45 or 53

E.1.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to January 05, 2017, **EBM Reviews - Database of Abstracts of Reviews of Effects 1st Quarter 2015** on 10th January 2017.

#	Searches
1	(CYSTIC FIBROSIS and DIAGNOSIS).kw.
2	(((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 diag\$).ti,ab.
3	or/1-2
4	(SIGNS or SYMPTOMS).kw.
5	(symptom\$ adj3 respirat\$).ti,ab.

#	Searches
6	((Chronic\$ or recur\$) adj5 (lung adj3 infection?)).ti,ab.
7	PNEUMONIA.kw.
8	pneumoni\$.ti,ab.
9	(inflamm\$ adj3 (lung? or pulmonary)).ti,ab.
10	(RESPIRATORY TRACT DISEASES and CHRONIC DISEASE).kw.
11	(chronic\$ adj3 respirat\$).ti,ab.
12	((Recurr\$ or chronic\$) adj2 cough\$).ti,ab.
13	FAILURE TO THRIVE.kw.
14	GROWTH DISORDERS.kw.
15	MALNUTRITION.kw.
16	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti,ab.
17	((grow\$ or weight or height or length) adj3 (disorder? or deficien\$ or poor\$ or retard\$ or restrict\$)).ti,ab.
18	(malnutrition\$ or underweight? or under weight? or wasting or stunting or stunted).ti,ab.
19	(SIGNS or SYMPTOMS).kw.
20	MALABSORPTION SYNDROMES.kw.
21	INTESTINAL ABSORPTION.kw.
22	malabsorption.ti,ab.
23	(Blind Loop Syndrome or C?eliac Disease or Sprue or Lactose Intoleran\$ or Short Bowel Syndrome or Steatorrhea or Whipple Disease).ti,ab.
24	INFERTILITY, MALE.kw.
25	((Infertil\$ or Steril\$ or sub-fertil\$ or subfertil\$) adj10 (male? or men)).ti,ab.
26	(Aspermia or Asthenozoospermia or Azoospermia or Oligospermia or Sertoli Cell-Only Syndrome).ti,ab.
27	PANCREATITIS.kw.
28	pancreatitis.ti,ab.
29	MECONIUM.kw.
30	Meconium ileus.ti,ab.
31	or/4-30
32	3 and 31
33	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 (doubt\$ or problem?))).ti,ab.
34	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 symptom?)).ti,ab.
35	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (sign? adj3 symptom?)).ti,ab.
36	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Symptom? adj3 progress\$)).ti,ab.
37	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 (Clinical adj2 (characteristic\$ or manifest\$))).ti,ab.
38	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 Atypical presentation?).ti,ab.
39	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 suspect\$).ti,ab.
40	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ("no screen\$" or "not screen\$" or unscreen\$ or "no test\$" or "not test\$")).ti,ab.
41	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ((miss\$ or never) adj3 (screen\$ or test\$))).ti,ab.
42	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 (present\$ or

#	Searches
	manifest\$)).ti,ab.
43	diagnos\$.ab. /freq=2
44	42 and 43
45	CYSTIC FIBROSIS.kw.
46	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
47	mucov\$.ti,ab.
48	or/45-47
49	DELAYED DIAGNOSIS.kw.
50	DIAGNOSTIC ERRORS.kw.
51	or/49-50
52	48 and 51
53	32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 44 or 52

E.1.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	exp "SIGNS AND SYMPTOMS, RESPIRATORY"/
6	(symptom\$ adj3 respirat\$).tw.
7	((Chronic\$ or recur\$) adj5 (lung adj3 infection?)).tw.
8	exp PNEUMONIA/
9	pneumoni\$.tw.
10	(inflamm\$ adj3 (lung? or pulmonary)).tw.
11	exp RESPIRATORY TRACT DISEASES/ and CHRONIC DISEASE/
12	(chronic\$ adj3 respirat\$).tw.
13	((Recurr\$ or chronic\$) adj2 cough\$).tw.
14	FAILURE TO THRIVE/
15	GROWTH DISORDERS/
16	MALNUTRITION/
17	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).tw.
18	((grow\$ or weight or height or length) adj3 (disorder? or deficien\$ or poor\$ or retard\$ or restrict\$)).tw.
19	(malnutrition\$ or underweight? or under weight? or wasting or stunting or stunted).tw.
20	exp "SIGNS AND SYMPTOMS, DIGESTIVE"/
21	exp MALABSORPTION SYNDROMES/
22	INTESTINAL ABSORPTION/
23	malabsorption.tw.
24	(Blind Loop Syndrome or C?eliac Disease or Sprue or Lactose Intoleran\$ or Short Bowel Syndrome or Steatorrhea or Whipple Disease).tw.
25	INFERTILITY, MALE/
26	((Infertil\$ or Steril\$ or sub-fertil\$ or subfertil\$) adj10 (male? or men)).tw.
27	(Aspermia or Asthenozoospermia or Azoospermia or Oligospermia or Sertoli Cell-Only

#	Searches
	Syndrome).tw.
28	exp PANCREATITIS/
29	pancreatitis.tw.
30	MECONIUM/
31	Meconium ileus.tw.
32	or/5-31
33	4 and 32
34	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 (doubt\$ or problem?))).tw.
35	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 symptom?)).tw.
36	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (sign? adj3 symptom?)).tw.
37	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Symptom? adj3 progress\$)).tw.
38	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 (Clinical adj2 (characteristic\$ or manifest\$))).tw.
39	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 Atypical presentation?)).tw.
40	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 suspect\$).tw.
41	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ("no screen\$" or "not screen\$" or unscreen\$ or "no test\$" or "not test\$")).tw.
42	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ((miss\$ or never) adj3 (screen\$ or test\$))).tw.
43	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 (present\$ or manifest\$)).tw.
44	diagnos\$.tw.
45	43 and 44
46	CYSTIC FIBROSIS/
47	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
48	mucov\$.tw.
49	or/46-48
50	DELAYED DIAGNOSIS/
51	DIAGNOSTIC ERRORS/
52	or/50-51
53	49 and 52
54	33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 45 or 53

E.1.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	*CYSTIC FIBROSIS/ and exp *DIAGNOSIS/
2	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj7 diag\$).ti,ab.
3	*CYSTIC FIBROSIS/di [Diagnosis]
4	or/1-3
5	PHYSICAL DISEASE BY BODY FUNCTION/
6	(symptom\$ adj3 respirat\$).ti.

#	Searches
7	(symptom\$ adj3 respirat\$).ab. /freq=2
8	((Chronic\$ or recur\$) adj5 (lung adj3 infection?)).ti,ab.
9	exp *PNEUMONIA/
10	pneumoni\$.ti.
11	pneumoni\$.ab. /freq=2
12	(inflamm\$ adj3 (lung? or pulmonary)).ti,ab.
13	exp RESPIRATORY TRACT DISEASE/ and CHRONIC DISEASE/
14	(chronic\$ adj3 respirat\$).ti,ab.
15	((Recurr\$ or chronic\$) adj2 cough\$).ti,ab.
16	*FAILURE TO THRIVE/
17	*GROWTH DISORDER/
18	*MALNUTRITION/
19	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti.
20	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ab. /freq=2
21	((grow\$ or weight or height or length) adj3 (disorder? or deficien\$ or poor\$ or retard\$ or restrict\$)).ti,ab.
22	(malnutrition\$ or underweight? or under weight? or wasting or stunting or stunted).ti.
23	(malnutrition\$ or underweight? or under weight? or wasting or stunting or stunted).ab. /freq=2
24	PHYSICAL DISEASE BY BODY FUNCTION/
25	exp *MALABSORPTION/
26	*INTESTINE ABSORPTION/
27	malabsorption.ti.
28	malabsorption.ab. /freq=2
29	(Blind Loop Syndrome or C?eliac Disease or Sprue or Lactose Intoleran\$ or Short Bowel Syndrome or Steatorrhea or Whipple Disease).ti,ab.
30	*MALE INFERTILITY/
31	((Infertil\$ or Steril\$ or sub-fertil\$ or subfertil\$) adj10 (male? or men)).ti,ab.
32	(Aspermia or Asthenozoospermia or Azoospermia or Oligospermia or Sertoli Cell-Only Syndrome).ti,ab.
33	exp *PANCREATITIS/
34	pancreatitis.ti.
35	pancreatitis.ab. /freq=2
36	*MECONIUM/ or *MECONIUM ILIUS/
37	Meconium ileus.ti,ab.
38	or/5-37
39	4 and 38
40	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 (doubt\$ or problem?))).ti,ab.
41	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Diagnos\$ adj5 symptom?)).ti,ab.
42	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (sign? adj3 symptom?)).ti,ab.
43	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 (Symptom? adj3 progress\$)).ti,ab.
44	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 (Clinical adj2 (characteristic\$ or manifest\$))).ti,ab.
45	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 Atypical

#	Searches
	presentation?).ti,ab.
46	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 suspect\$).ti,ab.
47	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ("no screen\$" or "not screen\$" or unscreen\$ or "no test\$" or "not test\$")).ti,ab.
48	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj10 ((miss\$ or never) adj3 (screen\$ or test\$))).ti,ab.
49	(((((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)) or mucov\$) adj5 (present\$ or manifest\$)).ti,ab.
50	diagnos\$.ab. /freq=3
51	49 and 50
52	*CYSTIC FIBROSIS/
53	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
54	mucov\$.ti,ab.
55	or/52-54
56	*DELAYED DIAGNOSIS/
57	exp *DIAGNOSTIC ERROR/
58	or/56-57
59	55 and 58
60	39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 51 or 59
61	limit 60 to english language
62	letter.pt. or LETTER/
63	note.pt.
64	editorial.pt.
65	CASE REPORT/ or CASE STUDY/
66	(letter or comment*).ti.
67	or/62-66
68	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
69	67 not 68
70	ANIMAL/ not HUMAN/
71	NONHUMAN/
72	exp ANIMAL EXPERIMENT/
73	exp EXPERIMENTAL ANIMAL/
74	ANIMAL MODEL/
75	exp RODENT/
76	(rat or rats or mouse or mice).ti.
77	or/69-76
78	61 not 77

E.2 What information and support should be given to children, young people and adults with cystic fibrosis?

E.2.1 Database: Medline

Last searched on Ovid MEDLINE(R) 1946 to November Week 1 2016 on 10th November 2016.

#	Searches
1	CYSTIC FIBROSIS/

#	Searches
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	HEALTH EDUCATION/
6	exp CONSUMER HEALTH INFORMATION/
7	PATIENT EDUCATION AS TOPIC/
8	patient education handout.pt.
9	guideline.pt.
10	((information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruction\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
11	((information\$ or educat\$) adj3 (model\$ or program\$ or need\$ or requirement\$ or support\$ or seek\$ or access\$ or disseminat\$)).ti,ab.
12	(PUBLICATIONS/ or PAMPHLETS/ or POSTERS AS TOPIC/) and (patient\$ or famil\$ or parent? or parental or father\$ or paternal or mother\$ or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti,ab.
13	(exp COUNSELING/ or DECISION SUPPORT TECHNIQUES/ or SOCIAL SUPPORT/) and (patient\$ or famil\$ or parent? or parental or father\$ or paternal or mother\$ or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti.
14	((patient\$ or famil\$ or parent? or parental or father\$ or mother\$ or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
15	((patient\$ or famil\$ or parent? or parental or father\$ or paternal or mother\$ or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
16	((language\$ or age\$ or gender\$ or cultur\$ or person\$ or stage\$ of life or life stage\$ or lifestyle\$ or leisure) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
17	((pregnan\$ or fertil\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti,ab.
18	exp SELF-HELP GROUPS/
19	CHARITIES/ or charit\$.ti,ab.
20	HOTLINES/
21	exp TELEPHONE/
22	(hotline\$ or helpline\$ or telephone\$ or phone\$ or smartphone\$ or mobile\$).ti,ab.
23	exp INTERNET/
24	SOCIAL NETWORKING/
25	(social network\$ or social media\$ or facebook\$ or twitter or blog\$ or youtube).ti,ab.
26	exp PSYCHOTHERAPY/
27	((self help\$ or support\$ or counsel\$ or psycho\$) adj (group\$ or session\$ or program\$ or meeting\$ or therap\$)).ti,ab.
28	psychotherap\$.ti,ab.

#	Searches
29	STRESS, PSYCHOLOGICAL/pc
30	(checklist\$ or check list\$).ti,ab.
31	PROFESSIONAL-FAMILY RELATIONS/ or PROFESSIONAL-PATIENT RELATIONS/
32	PATIENT CARE TEAM/
33	(named contact or named person or named individual or point of contact or key worker\$).ti,ab.
34	exp PATIENT CARE PLANNING/
35	((timing or frequency or transition\$) and (inform\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or consult\$ or involvement or support\$ or counsel\$ or discuss\$)).ti,ab.
36	exp HOME CARE SERVICES/
37	home support\$.ti,ab.
38	home nurs\$.ti,ab.
39	outreach\$.ti,ab.
40	SCHOOLS/
41	SCHOOL NURSING/
42	((school\$ or education) adj3 (staff or teacher\$ or nurs\$ or healthcare or support\$)).ti,ab.
43	SOCIAL WELFARE/
44	SOCIAL SECURITY/
45	((social or disab\$ or income or unemploy\$) adj (security or aid or benefit\$ or credit\$ or welfare)).ti,ab.
46	or/5-45
47	and/4,46
48	limit 47 to english language
49	LETTER/
50	EDITORIAL/
51	NEWS/
52	exp HISTORICAL ARTICLE/
53	ANECDOTES AS TOPIC/
54	COMMENT/
55	CASE REPORT/
56	(letter or comment*).ti.
57	or/49-56
58	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
59	57 not 58
60	ANIMALS/ not HUMANS/
61	exp ANIMALS, LABORATORY/
62	exp ANIMAL EXPERIMENTATION/
63	exp MODELS, ANIMAL/
64	exp RODENTIA/
65	(rat or rats or mouse or mice).ti.
66	or/59-65
67	48 not 66

E.2.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations November 09, 2016 on 10th November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	1 or 2
4	patient education handout.pt.
5	guideline.pt.
6	((information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruction\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
7	((information\$ or educat\$) adj3 (model\$ or program\$ or need\$ or requirement\$ or support\$ or seek\$ or access\$ or disseminat\$)).ti,ab.
8	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
9	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
10	((language\$ or age\$ or gender\$ or cultur\$ or person\$ or stage\$ of life or life stage\$ or lifestyle\$ or leisure) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
11	((pregnan\$ or fertil\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti,ab.
12	charit\$.ti,ab.
13	(hotline\$ or helpline\$ or telephone\$ or phone\$ or smartphone\$ or mobile\$).ti,ab.
14	(social network\$ or social media\$ or facebook\$ or twitter or blog\$ or youtube).ti,ab.
15	((self help\$ or support\$ or counsel\$ or psycho\$) adj (group\$ or session\$ or program\$ or meeting\$ or therap\$)).ti,ab.
16	psychotherap\$.ti,ab.
17	(checklist\$ or check list\$).ti,ab.
18	patient care team.ti,ab.
19	(named contact or named person or named individual or point of contact or key worker\$).ti,ab.
20	((timing or frequency or transition\$) and (inform\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ involvement or support\$ or counsel\$ or discuss\$)).ti,ab.
21	home care.ti,ab.
22	home support\$.ti,ab.
23	home nurs\$.ti,ab.
24	outreach\$.ti,ab.

#	Searches
25	((school\$ or education) adj3 (staff or teacher\$ or nurs\$ or healthcare or support\$)).ti,ab.
26	((social or disab\$ or income or unemploy\$) adj (security or aid or benefit\$ or credit\$ or welfare)).ti,ab.
27	or/4-26
28	3 and 27

E.2.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials**
 October 2016 on 10th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	HEALTH EDUCATION/
6	exp CONSUMER HEALTH INFORMATION/
7	PATIENT EDUCATION AS TOPIC/
8	patient education handout.pt.
9	guideline.pt.
10	((information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruction\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
11	((information\$ or educat\$) adj3 (model\$ or program\$ or need\$ or requirement\$ or support\$ or seek\$ or access\$ or disseminat\$)).ti,ab.
12	(PUBLICATIONS/ or PAMPHLETS/ or POSTERS AS TOPIC/) and (patient\$ or famil\$ or parent? or parental or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti,ab.
13	(exp COUNSELING/ or DECISION SUPPORT TECHNIQUES/ or SOCIAL SUPPORT/) and (patient\$ or famil\$ or parent? or parental or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti.
14	((patient\$ or famil\$ or parent? or parental or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
15	((patient\$ or famil\$ or parent? or parental or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
16	((language\$ or age\$ or gender\$ or cultur\$ or person\$ or stage\$ of life or life stage\$ or lifestyle\$ or leisure) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
17	((pregnan\$ or fertil\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti,ab.
18	exp SELF-HELP GROUPS/

#	Searches
19	CHARITIES/ or charit\$.ti,ab.
20	HOTLINES/
21	exp TELEPHONE/
22	(hotline\$ or helpline\$ or telephone\$ or phone\$ or smartphone\$ or mobile\$).ti,ab.
23	exp INTERNET/
24	SOCIAL NETWORKING/
25	(social network\$ or social media\$ or facebook\$ or twitter or blog\$ or youtube).ti,ab.
26	exp PSYCHOTHERAPY/
27	((self help\$ or support\$ or counsel\$ or psycho\$) adj (group\$ or session\$ or program\$ or meeting\$ or therap\$)).ti,ab.
28	psychotherap\$.ti,ab.
29	STRESS, PSYCHOLOGICAL/pc
30	(checklist\$ or check list\$).ti,ab.
31	PROFESSIONAL-FAMILY RELATIONS/ or PROFESSIONAL-PATIENT RELATIONS/
32	PATIENT CARE TEAM/
33	(named contact or named person or named individual or point of contact or key worker\$).ti,ab.
34	exp PATIENT CARE PLANNING/
35	((timing or frequency or transition\$) and (inform\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or consult\$ or involvement or support\$ or counsel\$ or discuss\$)).ti,ab.
36	exp HOME CARE SERVICES/
37	home support\$.ti,ab.
38	home nurs\$.ti,ab.
39	outreach\$.ti,ab.
40	SCHOOLS/
41	SCHOOL NURSING/
42	((school\$ or education) adj3 (staff or teacher\$ or nurs\$ or healthcare or support\$)).ti,ab.
43	SOCIAL WELFARE/
44	SOCIAL SECURITY/
45	((social or disab\$ or income or unemploy\$) adj (security or aid or benefit\$ or credit\$ or welfare)).ti,ab.
46	or/5-45
47	and/4,46
48	limit 47 to english language

E.2.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to November 09, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects 1st Quarter 2015** on 10th November 2016.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3

#	Searches
5	HEALTH EDUCATION.kw.
6	CONSUMER HEALTH INFORMATION.kw.
7	PATIENT EDUCATION AS TOPIC.kw.
8	((information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruction\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
9	((information\$ or educat\$) adj3 (model\$ or program\$ or need\$ or requirement\$ or support\$ or seek\$ or access\$ or disseminat\$)).ti,ab.
10	(PUBLICATIONS or PAMPHLETS or POSTERS AS TOPIC).kw. and (patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti,ab.
11	(COUNSELING or DECISION SUPPORT TECHNIQUES or SOCIAL SUPPORT).kw. and (patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti.
12	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
13	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
14	((language\$ or age\$ or gender\$ or cultur\$ or person\$ or stage\$ of life or life stage\$ or lifestyle\$ or leisure) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
15	((pregnan\$ or fertil\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti,ab.
16	SELF-HELP GROUPS.kw.
17	CHARITIES.kw. or charit\$.ti,ab.
18	HOTLINES.kw.
19	TELEPHONE.kw.
20	(hotline\$ or helpline\$ or telephone\$ or phone\$ or smartphone\$ or mobile\$).ti,ab.
21	INTERNET.kw.
22	SOCIAL NETWORKING.kw.
23	(social network\$ or social media\$ or facebook\$ or twitter or blog\$ or youtube).ti,ab.
24	PSYCHOTHERAPY.kw.
25	((self help\$ or support\$ or counsel\$ or psycho\$) adj (group\$ or session\$ or program\$ or meeting\$ or therap\$)).ti,ab.
26	psychotherap\$.ti,ab.
27	STRESS, PSYCHOLOGICAL.kw.
28	(checklist\$ or check list\$).ti,ab.
29	(PROFESSIONAL-FAMILY RELATIONS or PROFESSIONAL-PATIENT RELATIONS).kw.
30	PATIENT CARE TEAM.kw.

#	Searches
31	(named contact or named person or named individual or point of contact or key worker\$.ti,ab.
32	PATIENT CARE PLANNING.kw.
33	((timing or frequency or transition\$) and (inform\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or consult\$ or involvement or support\$ or counsel\$ or discuss\$)).ti,ab.
34	HOME CARE SERVICES.kw.
35	home support\$.ti,ab.
36	home nurs\$.ti,ab.
37	outreach\$.ti,ab.
38	SCHOOLS.kw.
39	SCHOOL NURSING.kw.
40	((school\$ or education) adj3 (staff or teacher\$ or nurs\$ or healthcare or support\$)).ti,ab.
41	SOCIAL WELFARE.kw.
42	SOCIAL SECURITY.kw.
43	((social or disab\$ or income or unemploy\$) adj (security or aid or benefit\$ or credit\$ or welfare)).ti,ab.
44	or/5-43
45	4 and 44

E.2.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp HEALTH EDUCATION/
6	PATIENT EDUCATION AS TOPIC/
7	((information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruction\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
8	((information\$ or educat\$) adj3 (model\$ or program\$ or need\$ or requirement\$ or support\$ or seek\$ or access\$ or disseminat\$)).ti,ab.
9	(PUBLICATIONS/ or PAMPHLETS/ or POSTERS AS TOPIC/) and (patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti,ab.
10	(exp COUNSELING/ or DECISION SUPPORT TECHNIQUES/ or SOCIAL SUPPORT/) and (patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti.
11	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.

#	Searches
12	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
13	((language\$ or age\$ or gender\$ or cultur\$ or person\$ or stage\$ of life or life stage\$ or lifestyle\$ or leisure) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
14	((pregnan\$ or fertil\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti,ab.
15	exp SELF-HELP GROUPS/
16	exp CHARITIES/ or charit\$.ti,ab.
17	HOTLINES/
18	exp TELEPHONE/
19	(hotline\$ or helpline\$ or telephone\$ or phone\$ or smartphone\$ or mobile\$).ti,ab.
20	exp INTERNET/
21	(social network\$ or social media\$ or facebook\$ or twitter or blog\$ or youtube).ti,ab.
22	exp PSYCHOTHERAPY/
23	((self help\$ or support\$ or counsel\$ or psycho\$) adj (group\$ or session\$ or program\$ or meeting\$ or therap\$)).ti,ab.
24	psychotherap\$.ti,ab.
25	STRESS, PSYCHOLOGICAL/pc
26	(checklist\$ or check list\$).ti,ab.
27	PROFESSIONAL-FAMILY RELATIONS/ or PROFESSIONAL-PATIENT RELATIONS/
28	PATIENT CARE TEAM/
29	(named contact or named person or named individual or point of contact or key worker\$).ti,ab.
30	exp PATIENT CARE PLANNING/
31	((timing or frequency or transition\$) and (inform\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or consult\$ or involvement or support\$ or counsel\$ or discuss\$)).ti,ab.
32	exp HOME CARE SERVICES/
33	home support\$.ti,ab.
34	home nurs\$.ti,ab.
35	outreach\$.ti,ab.
36	SCHOOLS/
37	SCHOOL NURSING/
38	((school\$ or education) adj3 (staff or teacher\$ or nurs\$ or healthcare or support\$)).ti,ab.
39	exp SOCIAL WORK/
40	exp SOCIAL WELFARE/
41	((social or disab\$ or income or unemploy\$) adj (security or aid or benefit\$ or credit\$ or welfare)).ti,ab.
42	or/5-41
43	4 and 42

E.2.6 Database: Embase

Last searched on **Embase** 1974 to 2016 Week 45 on 10th November 2016.

#	Searches
1	cystic fibrosis/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	health education/
6	consumer health information/
7	patient information/
8	patient education/
9	((information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruction\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
10	((information\$ or educat\$) and (model\$ or program\$ or need\$ or requirement\$ or support\$ or seek\$ or access\$ or disseminat\$)).ti.
11	PUBLICATION/ and (patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti.
12	(exp COUNSELING/ or DECISION SUPPORT SYSTEM/ or SOCIAL SUPPORT/) and (patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti.
13	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
14	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
15	((language\$ or age\$ or gender\$ or cultur\$ or person\$ or stage\$ of life or life stage\$ or lifestyle\$ or leisure) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
16	((pregnan\$ or fertil\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti,ab.
17	self help/
18	charit\$.ti.
19	telephone/
20	mobile phone/
21	mobile application/
22	(hotline\$ or helpline\$ or telephone\$ or phone\$ or smartphone\$ or mobile\$).ti.
23	internet/
24	social network/
25	(social network\$ or social media\$ or facebook\$ or twitter or blog\$ or youtube).ti,ab.
26	exp psychotherapy/

#	Searches
27	((self help\$ or support\$ or counsel\$ or psycho\$) adj (group\$ or session\$ or program\$ or meeting\$ or therap\$)).ti,ab.
28	psychotherap\$.ti,ab.
29	mental stress/pc [Prevention]
30	(checklist\$ or check list\$).ti.
31	human relation/
32	doctor patient relation/
33	(named contact or named person or named individual or point of contact or key worker\$).ti,ab.
34	patient care planning/
35	((timing or frequency or transition\$) and (inform\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or consult\$ or involvement or support\$ or counsel\$ or discuss\$)).ti.
36	exp home care/
37	home support\$.ti,ab.
38	home nurs\$.ti,ab.
39	outreach\$.ti,ab.
40	community care/
41	school health education/ or school health service/ or school health nursing/
42	((school\$ or education) adj3 (staff or teacher\$ or nurs\$ or healthcare or support\$)).ti,ab.
43	school/
44	social welfare/
45	social security/
46	((social or disab\$ or income or unemploy\$) adj (security or aid or benefit\$ or credit\$ or welfare)).ti,ab.
47	or/5-46
48	4 and 47
49	letter.pt. or LETTER/
50	note.pt.
51	editorial.pt.
52	CASE REPORT/ or CASE STUDY/
53	(letter or comment*).ti.
54	or/49-53
55	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
56	54 not 55
57	ANIMAL/ not HUMAN/
58	NONHUMAN/
59	exp ANIMAL EXPERIMENT/
60	exp EXPERIMENTAL ANIMAL/
61	ANIMAL MODEL/
62	exp RODENT/
63	(rat or rats or mouse or mice).ti.
64	or/56-63
65	48 not 64
66	limit 65 to english language

E.2.7 Database: PsycINFO

Last searched on **PsycINFO 1967 to October 2016** on 10th November 2016.

#	Searches
1	cystic fibrosis/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	health education/
6	client education/
7	Patients/ and Information/
8	((information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruction\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
9	((information\$ or educat\$) adj3 (model\$ or program\$ or need\$ or requirement\$ or support\$ or seek\$ or access\$ or disseminat\$)).ti,ab.
10	exp printed communications media/ or exp reading materials/
11	(exp COUNSELING/ or exp COUNSELORS/ or exp FAMILY THERAPY/ or exp DECISION MAKING/ or SOCIAL SUPPORT/) and (patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti.
12	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
13	((patient\$ or famil\$ or parent? or parental or father* or paternal or mother* or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
14	((language\$ or age\$ or gender\$ or cultur\$ or person\$ or stage\$ of life or life stage\$ or lifestyle\$ or leisure) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
15	((pregnan\$ or fertil\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti,ab.
16	SUPPORT GROUPS/
17	nonprofit organizations/
18	charit\$.ti,ab.
19	hot line services/
20	exp telephone systems/
21	(hotline\$ or helpline\$ or telephone\$ or phone\$ or smartphone\$ or mobile\$).ti,ab.
22	exp internet/
23	online social networks/
24	(social network\$ or social media\$ or facebook\$ or twitter or blog\$ or youtube).ti,ab.
25	exp PSYCHOTHERAPY/
26	((self help\$ or support\$ or counsel\$ or psycho\$) adj (group\$ or session\$ or program\$ or meeting\$ or therap\$)).ti,ab.

#	Searches
27	psychotherap\$.ti,ab.
28	psychological stress/ or "stress and coping measures"/
29	(checklist\$ or check list\$).ti,ab.
30	(named contact or named person or named individual or point of contact or key worker\$).ti,ab.
31	exp treatment planning/
32	((timing or frequency or transition\$) and (inform\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or consult\$ or involvement or support\$ or counsel\$ or discuss\$)).ti,ab.
33	home care/ or adult day care/ or home visiting programs/
34	home support\$.ti,ab.
35	home nurs\$.ti,ab.
36	outreach\$.ti,ab.
37	exp OUTREACH PROGRAMS/
38	((school\$ or education) adj3 (staff or teacher\$ or nurs\$ or healthcare or support\$)).ti,ab.
39	exp schools/
40	school nurses/
41	exp Community Welfare Services/ or exp "Welfare Services (Government)"/
42	social security/
43	((social or disab\$ or income or unemploy\$) adj (security or aid or benefit\$ or credit\$ or welfare)).ti,ab.
44	or/5-43
45	4 and 44
46	limit 45 to english language

E.2.8 Database: CINAHL

Last searched on **CINHAL** on 8th November 2016.

Search ID#	Search Terms
S44	S5 AND S43
S43	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 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42
S42	TI ((social or disab* or income or unemploy*) N1 (security or aid or benefit* or credit* or welfare)) or AB ((social or disab* or income or unemploy*) N1 (security or aid or benefit* or credit* or welfare))
S41	(MH "Economic and Social Security")
S40	MH SOCIAL WELFARE
S39	TI ((school* or education) N3 (staff or teacher* or nurs* or healthcare or support*)) or AB ((school* or education) N3 (staff or teacher* or nurs* or healthcare or support*))
S38	MH SCHOOLS+
S37	TI outreach* or AB outreach*
S36	TI home nurs* or AB home nurs*
S35	TI home support* or AB home support*
S34	(MH "Home Health Care+")
S33	TI ((timing or frequency or transition*) and (inform* or educat* or learn* or train* or

Search ID#	Search Terms
	program* or advi?e* or instruct* or teach* or knowledge or understanding or misunderstanding or communicat* or miscommunicat* or consult* or involvement or support* or counsel* or discuss*) or AB ((timing or frequency or transition*) and (inform* or educat* or learn* or train* or program* or advi?e* or instruct* or teach* or knowledge or understanding or misunderstanding or communicat* or miscommunicat* or consult* or involvement or support* or counsel* or discuss*))
S32	(MH "Patient Care Plans+")
S31	TI (named contact or named person or named individual or point of contact or key worker*) or AB (named contact or named person or named individual or point of contact or key worker*)
S30	(MH "Multidisciplinary Care Team+")
S29	(MH "Professional-Patient Relations+") OR (MH "Professional-Family Relations")
S28	TI (checklist* or check list*) or AB (checklist* or check list*)
S27	(MH "Stress, Psychological+/PC")
S26	TI psychotherap*
S25	TI ((self help* or support* or counsel* or psycho*) N1 (group* or session* or program* or meeting* or therap*)) or AB ((self help* or support* or counsel* or psycho*) N1 (group* or session* or program* or meeting* or therap*))
S24	(MH "Psychotherapy+")
S23	TI (social network* or social media* or facebook* or twitter or blog* or youtube) or AB (social network* or social media* or facebook* or twitter or blog* or youtube)
S22	(MH "Social Networks")
S21	MH INTERNET
S20	TI (hotline* or helpline* or telephone* or phone* or smartphone* or mobile*)
S19	(MH "Telephone Information Services")
S18	MH CHARITIES OR TI charit*
S17	(MH "Psychotherapy, Group+")
S16	TI ((pregnan* or fertil*) N3 (information* or educat* or learn* or train* or program* or advi?e* or instruct* or teach* or knowledge or understanding or misunderstanding or communicat* or miscommunicat* or involvement or support* or counsel*)) or AB ((pregnan* or fertil*) N3 (information* or educat* or learn* or train* or program* or advi?e* or instruct* or teach* or knowledge or understanding or misunderstanding or communicat* or miscommunicat* or involvement or support* or counsel*))
S15	TI ((language* or age* or gender* or cultur* or person* or stage* of life or life stage* or lifestyle* or leisure) N3 (information* or educat* or learn* or train* or program* or advi?e* or instruct* or teach* or knowledge or understanding or misunderstanding or communicat* or miscommunicat* or involvement or support* or counsel*)) or AB ((language* or age* or gender* or cultur* or person* or stage* of life or life stage* or lifestyle* or leisure) N3 (information* or educat* or learn* or train* or program* or advi?e* or instruct* or teach* or knowledge or understanding or misunderstanding or communicat* or miscommunicat* or involvement or support* or counsel*))
S14	TI ((patient* or famil* or parent? or parental or father* or mother* or grandparent* or grandfather* or grandmother* or caregiver* or carer*) N3 (pamphlet* or leaflet* or booklet* or manual* or brochure* or publication* or handout* or electronic* or online or on-line or internet or website* or web site* or web page* or webpage* or app*1 or video* or dvd* or audio*)) or AB ((patient* or famil* or parent? or parental or father* or paternal or mother* or maternal or or grandparent* or grandfather* or grandmother* or caregiver* or carer*) N3 (pamphlet* or leaflet* or booklet* or manual* or brochure* or publication* or handout* or electronic* or online or on-line or internet or website* or web site* or web page* or webpage* or app*1 or video* or dvd* or audio*))
S13	TI ((patient* or famil* or parent? or parental or father* or paternal or mother* or maternal or or grandparent* or grandfather* or grandmother* or caregiver* or carer*) N3 (information* or educat* or learn* or train* or program* or advi?e* or instruct* or teach* or

Search ID#	Search Terms
	knowledge or understanding or misunderstanding or communicat* or miscommunicat* or involvement or support* or counsel*))
S12	(MH COUNSELING or MH DECISION SUPPORT TECHNIQUES or MH SOCIAL SUPPORT) and TI (patient* or famil* or parent? or parental or father* or paternal or mother* or maternal or grandparent* or grandfather* or grandmother* or caregiver* or carer*)
S11	(MH PUBLICATIONS/ or MH PAMPHLETS) and TI (patient* or famil* or parent* or parental or father* or paternal or mother* or maternal or grandparent* or grandfather* or grandmother* or caregiver* or carer*)
S10	TI ((information* or educat*) N3 (model* or program* or need* or requirement* or support* or seek* or access* or disseminat*))
S9	TI ((information* or educat* or learn* or train* or program* or advi?e* or instruction* or teach* or knowledge or understanding or misunderstanding or communicat* or miscommunicat* or involvement or support* or counsel*) N3 (pamphlet* or leaflet* or booklet* or manual* or brochure* or publication* or handout* or electronic* or online or on-line or internet or website* or web site* or web page* or webpage* or app*1 or video* or dvd* or audio*))
S8	MH PATIENT EDUCATION
S7	MH CONSUMER HEALTH INFORMATION
S6	MH HEALTH EDUCATION
S5	S1 or S2 or S3 or S4
S4	TI mucov* OR AB mucov*
S3	AB ((cystic or pancrea*) N2 (fibrosis or fibrocystic))
S2	TI ((cystic or pancrea*) N2 (fibrosis or fibrocystic))
S1	MH CYSTIC FIBROSIS

E.2.9 Database: AMED

Last searched on **AMED 1985 to October 2016** on 10th November 2016.

#	Searches
1	cystic fibrosis/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	Health education/
6	exp patient education/
7	((information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruction\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
8	((information\$ or educat\$) adj3 (model\$ or program\$ or need\$ or requirement\$ or support\$ or seek\$ or access\$ or disseminat\$)).ti,ab.
9	exp Publications/ and (patient\$ or famil\$ or parent? or parental or father\$ or paternal or mother\$ or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti,ab.
10	(exp COUNSELING/ or DECISION MAKING/ or SOCIAL SUPPORT/) and (patient\$ or famil\$ or parent? or parental or father\$ or paternal or mother\$ or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti,ab.
11	((patient\$ or famil\$ or parent? or parental or father\$ or mother\$ or grandparent\$ or

#	Searches
	grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
12	((patient\$ or famil\$ or parent? or parental or father\$ or paternal or mother\$ or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
13	((language\$ or age\$ or gender\$ or cultur\$ or person\$ or stage\$ of life or life stage\$ or lifestyle\$ or leisure) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
14	((pregnan\$ or fertil\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti,ab.
15	Self help groups/
16	CHARITIES/ or charit\$.ti,ab.
17	exp communications media/
18	(hotline\$ or helpline\$ or telephone\$ or phone\$ or smartphone\$ or mobile\$).ti,ab.
19	(internet or social network\$ or social media\$ or facebook\$ or twitter or blog\$ or youtube).ti,ab.
20	exp psychotherapy/
21	((self help\$ or support\$ or counsel\$ or psycho\$) adj (group\$ or session\$ or program\$ or meeting\$ or therap\$)).ti,ab.
22	psychotherap\$.ti,ab.
23	stress psychological/
24	(checklist\$ or check list\$).ti,ab.
25	professional family relations/ or exp professional patient relations/
26	patient care team/
27	(named contact or named person or named individual or point of contact or key worker\$).ti,ab.
28	patient care planning/
29	((timing or frequency or transition\$) and (inform\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or consult\$ or involvement or support\$ or counsel\$ or discuss\$)).ti,ab.
30	exp home care services/
31	home support\$.ti,ab.
32	home nurs\$.ti,ab.
33	outreach\$.ti,ab.
34	schools/
35	((school\$ or education) adj3 (staff or teacher\$ or nurs\$ or healthcare or support\$)).ti,ab.
36	school health services/
37	social welfare/
38	social security/
39	((social or disab\$ or income or unemploy\$) adj (security or aid or benefit\$ or credit\$ or welfare)).ti,ab.
40	or/5-39
41	4 and 40

#	Searches
42	limit 41 to english language

E.2.10 Database: HMIC

Last searched on **HMIC 1979 to September 2016** on 10th November 2016.

#	Searches
1	cystic fibrosis/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	Health education/
6	exp patient education/
7	((information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
8	((information\$ or educat\$) adj3 (model\$ or program\$ or need\$ or requirement\$ or support\$ or seek\$ or access\$ or disseminat\$)).ti,ab.
9	exp Publications/ and (patient\$ or famil\$ or parent? or parental or father\$ or paternal or mother\$ or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti,ab.
10	(exp COUNSELING/ or DECISION MAKING/ or SOCIAL SUPPORT/) and (patient\$ or famil\$ or parent? or parental or father\$ or paternal or mother\$ or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$).ti,ab.
11	((patient\$ or famil\$ or parent? or parental or father\$ or mother\$ or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
12	((patient\$ or famil\$ or parent? or parental or father\$ or paternal or mother\$ or maternal or grandparent\$ or grandfather\$ or grandmother\$ or caregiver\$ or carer\$) adj3 (pamphlet\$ or leaflet\$ or booklet\$ or manual\$ or brochure\$ or publication\$ or handout\$ or electronic\$ or online or on-line or internet or website\$ or web site\$ or web page\$ or webpage\$ or app\$1 or video\$ or dvd\$ or audio\$)).ti,ab.
13	((language\$ or age\$ or gender\$ or cultur\$ or person\$ or stage\$ of life or life stage\$ or lifestyle\$ or leisure) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti.
14	((pregnan\$ or fertil\$) adj3 (information\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or involvement or support\$ or counsel\$)).ti,ab.
15	Self help groups/
16	CHARITIES/ or charit\$.ti,ab.
17	INTERNET/ or INTERNET WEBSITES/
18	SOCIAL NETWORKING/
19	(hotline\$ or helpline\$ or telephone\$ or phone\$ or smartphone\$ or mobile\$).ti,ab.
20	(internet or social network\$ or social media\$ or facebook\$ or twitter or blog\$ or youtube).ti,ab.
21	exp psychotherapy/
22	((self help\$ or support\$ or counsel\$ or psycho\$) adj (group\$ or session\$ or program\$ or

#	Searches
	meeting\$ or therap\$).ti,ab.
23	psychotherap\$.ti,ab.
24	exp STRESS/
25	(checklist\$ or check list\$).ti,ab.
26	PATIENT EMPOWERMENT/
27	patient care team/
28	(named contact or named person or named individual or point of contact or key worker\$).ti,ab.
29	exp HEALTH PLANS/
30	((timing or frequency or transition\$) and (inform\$ or educat\$ or learn\$ or train\$ or program\$ or advi?e\$ or instruct\$ or teach\$ or knowledge or understanding or misunderstanding or communicat\$ or miscommunicat\$ or consult\$ or involvement or support\$ or counsel\$ or discuss\$)).ti,ab.
31	exp home care/
32	home support\$.ti,ab.
33	home nurs\$.ti,ab.
34	outreach\$.ti,ab.
35	schools/
36	((school\$ or education) adj3 (staff or teacher\$ or nurs\$ or healthcare or support\$)).ti,ab.
37	school health services/
38	social welfare/
39	social security/
40	((social or disab\$ or income or unemploy\$) adj (security or aid or benefit\$ or credit\$ or welfare)).ti,ab.
41	or/5-40
42	4 and 41

E.3 Service delivery

E.3.1 What is the effectiveness of different models of care (for example, specialist centre, shared care [delivered by a Network CF Clinic which is part of an agreed designated network with a Specialist CF Centre], community, telehealth and/or home care for people with CF?

E.3.1.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	"DELIVERY OF HEALTH CARE"/
6	HEALTH SERVICES ADMINISTRATION/
7	MODELS, ORGANIZATIONAL/
8	MODELS, NURSING/
9	((care or healthcare) adj3 (organi\$ or deliv\$)).ab,ti.
10	((care or healthcare or organi\$ or nursing or nurse?) adj3 (model? or design\$)).ab,ti.

#	Searches
11	(special\$ adj3 (center? or centre? or clinic?)).ab,ti.
12	exp TELEMEDICINE/
13	(telehealth\$ or tele health\$ or telemedicine\$ or tele medicine\$ or teleconsult\$ or tele consult\$).ab,ti.
14	(Remote\$ adj3 monitor\$).ab,ti.
15	((share? or network\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
16	HOME CARE SERVICES/
17	HOME HEALTH NURSING/
18	HOME INFUSION THERAPY/
19	((home? or domicil\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
20	(hospital? adj2 home?).ab,ti.
21	((home? or domicil\$) adj3 (Infusion therap\$ or Intravenous\$ or IV)).ab,ti.
22	(outreach adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
23	COMMUNITY HEALTH SERVICES/
24	exp COMMUNITY HEALTH NURSING/
25	CHILD HEALTH SERVICES/
26	(communit\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
27	((nursing or nurse?) adj3 (communit\$ or home? or domicil\$ or school?)).ab,ti.
28	PALLIATIVE CARE/
29	(palliative adj3 (care or healthcare or service?)).ab,ti.
30	HEALTH SERVICES ACCESSIBILITY/
31	(access\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
32	or/5-31
33	4 and 32
34	limit 33 to english language
35	LETTER/
36	EDITORIAL/
37	NEWS/
38	exp HISTORICAL ARTICLE/
39	ANECDOTES AS TOPIC/
40	COMMENT/
41	CASE REPORT/
42	(letter or comment*).ti.
43	or/35-42
44	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
45	43 not 44
46	ANIMALS/ not HUMANS/
47	exp ANIMALS, LABORATORY/
48	exp ANIMAL EXPERIMENTATION/
49	exp MODELS, ANIMAL/
50	exp RODENTIA/
51	(rat or rats or mouse or mice).ti.
52	or/45-51
53	34 not 52

E.3.1.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	or/1-2
4	((care or healthcare) adj3 (organi\$ or deliv\$)).ab,ti.
5	((care or healthcare or organi\$ or nursing or nurse?) adj3 (model? or design\$)).ab,ti.
6	(special\$ adj3 (center? or centre? or clinic?)).ab,ti.
7	(telehealth\$ or tele health\$ or telemedicine\$ or tele medicine\$ or teleconsult\$ or tele consult\$).ab,ti.
8	(Remote\$ adj3 monitor\$).ab,ti.
9	((share? or network\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
10	((home? or domicil\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
11	(hospital? adj2 home?).ab,ti.
12	((home? or domicil\$) adj3 (Infusion therap\$ or Intravenous\$ or IV)).ab,ti.
13	(outreach adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
14	(communit\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
15	((nursing or nurse?) adj3 (communit\$ or home? or domicil\$ or school?)).ab,ti.
16	(palliative adj3 (care or healthcare or service?)).ab,ti.
17	(access\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
18	or/4-17
19	3 and 18

E.3.1.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** November 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab,kw.
4	or/1-3
5	"DELIVERY OF HEALTH CARE"/
6	HEALTH SERVICES ADMINISTRATION/
7	MODELS, ORGANIZATIONAL/
8	MODELS, NURSING/
9	((care or healthcare) adj3 (organi\$ or deliv\$)).ti,ab,kw.
10	((care or healthcare or organi\$ or nursing or nurse?) adj3 (model? or design\$)).ti,ab,kw.
11	(special\$ adj3 (center? or centre? or clinic?)).ti,ab,kw.
12	exp TELEMEDICINE/
13	(telehealth\$ or tele health\$ or telemedicine\$ or tele medicine\$ or teleconsult\$ or tele consult\$).ti,ab,kw.
14	(Remote\$ adj3 monitor\$).ti,ab,kw.
15	((share? or network\$) adj3 (care or healthcare or center? or centre? or clinic? or

#	Searches
	service?)).ti,ab,kw.
16	HOME CARE SERVICES/
17	HOME HEALTH NURSING/
18	HOME INFUSION THERAPY/
19	((home? or domicil\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).ti,ab,kw.
20	(hospital? adj2 home?).ti,ab,kw.
21	((home? or domicil\$) adj3 (Infusion therap\$ or Intravenous\$ or IV)).ti,ab,kw.
22	(outreach adj3 (care or healthcare or center? or centre? or clinic? or service?)).ti,ab,kw.
23	COMMUNITY HEALTH SERVICES/
24	exp COMMUNITY HEALTH NURSING/
25	CHILD HEALTH SERVICES/
26	(communit\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).ti,ab,kw.
27	((nursing or nurse?) adj3 (communit\$ or home? or domicil\$ or school?)).ti,ab,kw.
28	PALLIATIVE CARE/
29	(palliative adj3 (care or healthcare or service?)).ti,ab,kw.
30	HEALTH SERVICES ACCESSIBILITY/
31	(access\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).ti,ab,kw.
32	or/5-31
33	4 and 32

E.3.1.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to January 05, 2017, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw,tx.
3	mucov\$.tw,tx.
4	or/1-3
5	"DELIVERY OF HEALTH CARE".kw.
6	HEALTH SERVICES ADMINISTRATION.kw.
7	MODELS, ORGANIZATIONAL.kw.
8	MODELS, NURSING.kw.
9	((care or healthcare) adj3 (organi\$ or deliv\$)).tw,tx.
10	((care or healthcare or organi\$ or nursing or nurse?) adj3 (model? or design\$)).tw,tx.
11	(special\$ adj3 (center? or centre? or clinic?)).tw,tx.
12	TELEMEDICINE.kw.
13	(telehealth\$ or tele health\$ or telemedicine\$ or tele medicine\$ or teleconsult\$ or tele consult\$).tw,tx.
14	(Remote\$ adj3 monitor\$).tw,tx.
15	((share? or network\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw,tx.
16	HOME CARE SERVICES.kw.
17	HOME HEALTH NURSING.kw.

#	Searches
18	HOME INFUSION THERAPY.kw.
19	((home? or domicil\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw,tx.
20	(hospital? adj2 home?).tw,tx.
21	((home? or domicil\$) adj3 (Infusion therap\$ or Intravenous\$ or IV)).tw,tx.
22	(outreach adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw,tx.
23	COMMUNITY HEALTH SERVICES.kw.
24	COMMUNITY HEALTH NURSING.kw.
25	CHILD HEALTH SERVICES.kw.
26	(communit\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw,tx.
27	((nursing or nurse?) adj3 (communit\$ or home? or domicil\$ or school?)).tw,tx.
28	PALLIATIVE CARE.kw.
29	(palliative adj3 (care or healthcare or service?)).tw,tx.
30	HEALTH SERVICES ACCESSIBILITY.kw.
31	(access\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw,tx.
32	or/5-31
33	4 and 32

E.3.1.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	"DELIVERY OF HEALTH CARE"/
6	HEALTH SERVICES ADMINISTRATION/
7	MODELS, ORGANIZATIONAL/
8	MODELS, NURSING/
9	((care or healthcare) adj3 (organi\$ or deliv\$)).tw.
10	((care or healthcare or organi\$ or nursing or nurse?) adj3 (model? or design\$)).tw.
11	(special\$ adj3 (center? or centre? or clinic?)).tw.
12	exp TELEMEDICINE/
13	(telehealth\$ or tele health\$ or telemedicine\$ or tele medicine\$ or teleconsult\$ or tele consult\$).tw.
14	(Remote\$ adj3 monitor\$).tw.
15	((share? or network\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw.
16	HOME CARE SERVICES/
17	HOME HEALTH NURSING/
18	HOME INFUSION THERAPY/
19	((home? or domicil\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw.
20	(hospital? adj2 home?).tw.
21	((home? or domicil\$) adj3 (Infusion therap\$ or Intravenous\$ or IV)).tw.

#	Searches
22	(outreach adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw.
23	COMMUNITY HEALTH SERVICES/
24	exp COMMUNITY HEALTH NURSING/
25	CHILD HEALTH SERVICES/
26	(communit\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw.
27	((nursing or nurse?) adj3 (communit\$ or home? or domicil\$ or school?)).tw.
28	PALLIATIVE CARE/
29	(palliative adj3 (care or healthcare or service?)).tw.
30	HEALTH SERVICES ACCESSIBILITY/
31	(access\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).tw.
32	or/5-31
33	4 and 32

E.3.1.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	*HEALTH CARE DELIVERY/
6	*HEALTH CARE ORGANIZATION/
7	*"ORGANIZATION AND MANAGEMENT"/
8	((care or healthcare) adj2 (organi\$ or deliv\$)).ab,ti.
9	((care or healthcare or organi\$ or nursing or nurse?) adj2 (model? or design\$)).ab,ti.
10	(special\$ adj2 (center? or centre? or clinic?)).ab,ti.
11	*TELEMEDICINE/
12	(telehealth\$ or tele health\$ or telemedicine\$ or tele medicine\$ or teleconsult\$ or tele consult\$).ab,ti.
13	(Remote\$ adj3 monitor\$).ab,ti.
14	((share? or network\$) adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
15	*HOME CARE/
16	VISITING NURSING SERVICE/
17	HOME INTRAVENOUS THERAPY/
18	((home? or domicil\$) adj2 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
19	(hospital? adj2 home?).ab,ti.
20	((home? or domicil\$) adj2 (Infusion therap\$ or Intravenous\$ or IV)).ab,ti.
21	(outreach adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
22	*COMMUNITY CARE/
23	*COMMUNITY HEALTH NURSING/
24	*CHILD HEALTH CARE/
25	(communit\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
26	((nursing or nurse?) adj3 (communit\$ or home? or domicil\$ or school?)).ab,ti.
27	*PALLIATIVE THERAPY/

#	Searches
28	(palliative adj3 (care or healthcare or service?)).ab,ti.
29	*HEALTH CARE DELIVERY/
30	(access\$ adj3 (care or healthcare or center? or centre? or clinic? or service?)).ab,ti.
31	or/5-30
32	4 and 31
33	limit 32 to english language
34	letter.pt. or LETTER/
35	note.pt.
36	editorial.pt.
37	CASE REPORT/ or CASE STUDY/
38	(letter or comment*).ti.
39	or/34-38
40	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
41	39 not 40
42	ANIMAL/ not HUMAN/
43	NONHUMAN/
44	exp ANIMAL EXPERIMENT/
45	exp EXPERIMENTAL ANIMAL/
46	ANIMAL MODEL/
47	exp RODENT/
48	(rat or rats or mouse or mice).ti.
49	or/41-48
50	33 not 49

E.3.1.7 Database: CINAHL

Last searched on **CINAHL** 1981 present on 11th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea*) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov*.ti,ab.
4	or/1-3
5	*HEALTH CARE DELIVERY/
6	* QUALITY MANAGEMENT, ORGANIZATIONAL/
7	((care or healthcare) adj2 (organi* or deliv*)).ab,ti.
8	((care or healthcare or organi* or nursing or nurse*) adj2 (model* or design*)).ab,ti.
9	(special* adj2 (center* or centre* or clinic*)).ab,ti.
10	exp *TELEMEDICINE/
11	(telehealth* or "tele health*" or telemedicine* or "tele medicine*" or teleconsult* or "tele consult*").ab,ti.
12	(Remote* adj2 monitor*).ab,ti.
13	((share* or network*) adj2 (care or healthcare or center* or centre* or clinic* or service*)).ab,ti.
14	*HOME HEALTH CARE/
15	*HOME NURSING, PROFESSIONAL/
16	*HOME INTRAVENOUS THERAPY/
17	((home* or domicil*) adj2 (care or healthcare or center* or centre* or clinic* or

#	Searches
	service*)),ab,ti.
18	(hospital* adj2 home*).ab,ti.
19	((home* or domicil*) adj2 (“Infusion therap*” or Intravenous* or IV)).ab,ti.
20	(outreach adj2 (care or healthcare or center* or centre* or clinic* or service*)).ab,ti.
21	*COMMUNITY HEALTH SERVICES/
22	*COMMUNITY HEALTH NURSING/
23	*CHILD HEALTH SERVICES/
24	(communit* adj2 (care or healthcare or center* or centre* or clinic* or service*)).ab,ti.
25	((nursing or nurse*) adj2 (communit* or home* or domicil* or school*)).ab,ti.
26	*PALLIATIVE CARE/
27	(palliative adj2 (care or healthcare or service*)).ab,ti.
28	*HEALTH SERVICES ACCESSIBILITY/
29	(access* adj2 (care or healthcare or center* or centre* or clinic* or service*)).ab,ti.
30	or/5-29
31	4 and 30 [LIMIT TO: (LANGUAGE ENGLISH)]

E.3.2 What is the clinical and cost-effectiveness of multidisciplinary teams of various compositions?

E.3.2.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	PATIENT CARE TEAM/
6	((patient? or medical or health) adj1 care team).ab,ti.
7	healthcare team?.ab,ti.
8	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$ or integrated or network\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti.
9	mdt?.ab,ti.
10	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti.
11	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti.
12	network meeting?.ti,ab.
13	INTERDISCIPLINARY COMMUNICATION/
14	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti.
15	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti.
16	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3

#	Searches
	(communic\$ or collaborat\$ or relation\$).ab,ti.
17	((co-ordinat\$ or coordinat\$ or network\$) adj3 (care or service? or practice?)).ab,ti.
18	or/5-17
19	4 and 18
20	limit 19 to english language
21	LETTER/
22	EDITORIAL/
23	NEWS/
24	exp HISTORICAL ARTICLE/
25	ANECDOTES AS TOPIC/
26	COMMENT/
27	CASE REPORT/
28	(letter or comment*).ti.
29	or/21-28
30	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
31	29 not 30
32	ANIMALS/ not HUMANS/
33	exp ANIMALS, LABORATORY/
34	exp ANIMAL EXPERIMENTATION/
35	exp MODELS, ANIMAL/
36	exp RODENTIA/
37	(rat or rats or mouse or mice).ti.
38	or/31-37
39	20 not 38

E.3.2.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	or/1-2
4	((patient? or medical or health) adj1 care team).ab,ti.
5	healthcare team?.ab,ti.
6	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$ or integrated or network\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti.
7	mdt?.ab,ti.
8	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti.
9	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti.
10	network meeting?.ti,ab.
11	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti.

#	Searches
12	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti.
13	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti.
14	((co-ordinat\$ or coordinat\$ or network\$) adj3 (care or service? or practice?)).ab,ti.
15	or/4-14
16	3 and 15

E.3.2.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** November 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ab,ti,kw.
3	mucov\$.ab,ti,kw.
4	or/1-3
5	PATIENT CARE TEAM/
6	((patient? or medical or health) adj1 care team).ab,ti,kw.
7	healthcare team?.ab,ti,kw.
8	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$ or integrated or network\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti,kw.
9	mdt?.ab,ti,kw.
10	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti,kw.
11	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti,kw.
12	network meeting?.ab,ti,kw.
13	INTERDISCIPLINARY COMMUNICATION/
14	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti,kw.
15	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti,kw.
16	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti,kw.
17	((co-ordinat\$ or coordinat\$ or network\$) adj3 (care or service? or practice?)).ab,ti,kw.
18	or/5-17
19	4 and 18

E.3.2.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to January 05, 2017, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.

#	Searches
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tx,tw.
3	mucov\$.tx,tw.
4	or/1-3
5	PATIENT CARE TEAM.kw.
6	((patient? or medical or health) adj1 care team).tx,tw.
7	healthcare team?.tx,tw.
8	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$ or integrated or network\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).tx,tw.
9	mdt?.tx,tw.
10	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).tx,tw.
11	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).tx,tw.
12	network meeting?.tx,tw.
13	INTERDISCIPLINARY COMMUNICATION.kw.
14	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).tx,tw.
15	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).tx,tw.
16	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).tx,tw.
17	((co-ordinat\$ or coordinat\$ or network\$) adj3 (care or service? or practice?)).tx,tw.
18	or/5-17
19	4 and 18

E.3.2.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	PATIENT CARE TEAM/
6	((patient? or medical or health) adj1 care team).tw.
7	healthcare team?.tw.
8	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$ or integrated or network\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).tw.
9	mdt?.tw.
10	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).tw.
11	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).tw.

#	Searches
12	network meeting?.tw.
13	INTERDISCIPLINARY COMMUNICATION/
14	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).tw.
15	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).tw.
16	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).tw.
17	((co-ordinat\$ or coordinat\$ or network\$) adj3 (care or service? or practice?)).tw.
18	or/5-17
19	4 and 18

E.3.2.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	MULTIDISCIPLINARY TEAM CARE/
6	((patient? or medical or health) adj1 care team).ab,ti.
7	healthcare team?.ab,ti.
8	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$ or integrated or network\$) adj3 (team? or staff\$ or task force? or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti.
9	mdt?.ab,ti.
10	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti.
11	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (team? or staff\$ or task force? or approach\$ or program\$ or system? or panel? or forum? or care or manag\$ or service?)).ab,ti.
12	network meeting?.ti,ab.
13	*INTERDISCIPLINARY COMMUNICATION/
14	((interdisciplinary or inter-disciplinary or interprofession\$ or inter-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti.
15	((multidisciplinary or multi-disciplinary or multiprofession\$ or multi-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti.
16	((transdisciplinary or trans-disciplinary or transprofession\$ or trans-profession\$) adj3 (communic\$ or collaborat\$ or relation\$)).ab,ti.
17	((co-ordinat\$ or coordinat\$ or network\$) adj3 (care or service? or practice?)).ab,ti.
18	or/5-17
19	4 and 18
20	limit 19 to english language
21	letter.pt. or LETTER/
22	note.pt.
23	editorial.pt.
24	CASE REPORT/ or CASE STUDY/

#	Searches
25	(letter or comment*).ti.
26	or/21-25
27	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
28	26 not 27
29	ANIMAL/ not HUMAN/
30	NONHUMAN/
31	exp ANIMAL EXPERIMENT/
32	exp EXPERIMENTAL ANIMAL/
33	ANIMAL MODEL/
34	exp RODENT/
35	(rat or rats or mouse or mice).ti.
36	or/28-35
37	20 not 36

E.4 What parts of the transition from children's to adult services are most important for young people with cystic fibrosis and their family members and carers?

E.4.1 Database: Medline

Last searched on Ovid MEDLINE(R) 1946 to October Week 4 2016 on 10th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp CONTINUITY OF PATIENT CARE/
6	(transition\$ and (service? or care or clinic? or setting\$ or healthcare or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice? or provider? or program\$ or "adult orient\$" or communit\$ or outpatient\$ or outreach)).ti,ab.
7	((transfer\$ or handoff or handover or "hand over") and (service\$ or care or clinic? or healthcare or setting\$ or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice\$ or provider\$ or communit\$ or outpatient\$ or outreach) and adult\$).ti,ab.
8	(transition\$ adj3 (coordinat\$ or framework? or manag\$ or prepar\$ or plan\$ or protocol\$ or support\$ or trajector\$ or pathway\$ or process\$ or readiness or timing or partnership\$ or program\$ or training or educat\$ or strateg\$ or failure\$ or barrier\$ or system?)).ti,ab.
9	(transition\$ and (MDT\$ or multidisciplinary team\$ or multiprofession\$ or interdisciplinar\$ or key worker\$ or consultant\$ or clinician\$ or specialist\$ or p?ediatrician\$ or social worker\$ or lead\$ or professional\$ or rehabilitation or staff or nurse\$ or therapist\$ or multiagenc\$ or agenc\$)).ti,ab.
10	(transition\$ and (communicat\$ or written or writing or verbal\$ or email\$ or electronic\$ or contact\$)).ti,ab.
11	(transition\$ and (admin\$ or record\$ or appointment\$ or checklist\$ or check list\$ or summar\$ or information or booklet\$ or pamphlet\$ or passport\$)).ti,ab.
12	((transition\$ and ("continued care" or "continuing care" or (continuity adj2 care))) adj5 (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$)).ti,ab.
13	(LIFESpan or Moving on well).ti,ab.

#	Searches
14	or/5-13
15	PATIENT CARE PLANNING/ and (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$).ti.
16	"SURVEYS AND QUESTIONNAIRES"/ or HEALTH CARE SURVEYS/
17	NEEDS ASSESSMENT/
18	16 or 17
19	(survey\$ or questionnaire\$).ti,ab.
20	18 or 19
21	15 and 20
22	14 or 21
23	4 and 22
24	limit 23 to english language
25	LETTER/
26	EDITORIAL/
27	NEWS/
28	exp HISTORICAL ARTICLE/
29	ANECDOTES AS TOPIC/
30	COMMENT/
31	CASE REPORT/
32	(letter or comment*).ti.
33	or/25-32
34	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
35	33 not 34
36	ANIMALS/ not HUMANS/
37	exp ANIMALS, LABORATORY/
38	exp ANIMAL EXPERIMENTATION/
39	exp MODELS, ANIMAL/
40	exp RODENTIA/
41	(rat or rats or mouse or mice).ti.
42	or/35-41
43	24 not 42

E.4.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations November 09, 2016 on 10th November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	1 or 2
4	(transition\$ and (service? or care or clinic? or setting\$ or healthcare or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice? or provider? or program\$ or "adult orient\$" or communit\$ or outpatient\$ or outreach)).ti,ab.
5	((transfer\$ or handoff or handover or "hand over") and (services\$ or care or clinic? or healthcare or setting\$ or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice\$ or provider\$ or communit\$ or outpatient\$ or outreach) and adult\$).ti,ab.

#	Searches
6	(transition\$ adj3 (coordinat\$ or framework? or manag\$ or prepar\$ or plan\$ or protocol\$ or support\$ or trajector\$ or pathway\$ or process\$ or readiness or timing or partnership\$ or program\$ or training or educat\$ or strateg\$ or failure\$ or barrier\$ or system?)).ti,ab.
7	(transition\$ and (MDT\$ or multidisciplinary team\$ or multiprofession\$ or interdisciplinar\$ or key worker\$ or consultant\$ or clinician\$ or specialist\$ or p?ediatrician\$ or social worker\$ or lead\$ or professional\$ or rehabilitation or staff or nurse\$ or therapist\$ or multiagenc\$ or agenc\$)).ti,ab.
8	(transition\$ and (communicat\$ or written or writing or verbal\$ or email\$ or electronic\$ or contact\$)).ti,ab.
9	(transition\$ and (admin\$ or record\$ or appointment\$ or checklist\$ or check list\$ or summar\$ or information or booklet\$ or pamphlet\$ or passport\$)).ti,ab.
10	((transition\$ and ("continued care" or "continuing care" or (continuity adj2 care))) adj5 (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$)).ti,ab.
11	(LIFEsplan or Moving on well).ti,ab.
12	or/4-11
13	(patient\$ adj2 plan\$).ti,ab. and (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$).ti.
14	(survey\$ or questionnaire\$).ti,ab.
15	13 or 14
16	12 or 15
17	3 and 16
18	limit 17 to english language

E.4.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials**
 October 2016 on 10th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp CONTINUITY OF PATIENT CARE/
6	(transition\$ and (service? or care or clinic? or setting\$ or healthcare or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice? or provider? or program\$ or "adult orient\$" or communit\$ or outpatient\$ or outreach)).ti,ab.
7	((transfer\$ or handoff or handover or "hand over") and (service\$ or care or clinic? or healthcare or setting\$ or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice\$ or provider\$ or communit\$ or outpatient\$ or outreach) and adult\$).ti,ab.
8	(transition\$ adj3 (coordinat\$ or framework? or manag\$ or prepar\$ or plan\$ or protocol\$ or support\$ or trajector\$ or pathway\$ or process\$ or readiness or timing or partnership\$ or program\$ or training or educat\$ or strateg\$ or failure\$ or barrier\$ or system?)).ti,ab.
9	(transition\$ and (MDT\$ or multidisciplinary team\$ or multiprofession\$ or interdisciplinar\$ or key worker\$ or consultant\$ or clinician\$ or specialist\$ or p?ediatrician\$ or social worker\$ or lead\$ or professional\$ or rehabilitation or staff or nurse\$ or therapist\$ or multiagenc\$ or agenc\$)).ti,ab.
10	(transition\$ and (communicat\$ or written or writing or verbal\$ or email\$ or electronic\$ or contact\$)).ti,ab.
11	(transition\$ and (admin\$ or record\$ or appointment\$ or checklist\$ or check list\$ or summar\$ or information or booklet\$ or pamphlet\$ or passport\$)).ti,ab.

#	Searches
12	((transition\$ and ("continued care" or "continuing care" or (continuity adj2 care))) adj5 (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$)).ti,ab.
13	(LIFEsplan or Moving on well).ti,ab.
14	or/5-13
15	PATIENT CARE PLANNING/ and (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$).ti.
16	"SURVEYS AND QUESTIONNAIRES"/ or HEALTH CARE SURVEYS/
17	NEEDS ASSESSMENT/
18	16 or 17
19	(survey\$ or questionnaire\$).ti,ab.
20	18 or 19
21	15 and 20
22	14 or 21
23	4 and 22
24	limit 23 to english language

E.4.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to November 09, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects 1st Quarter 2015** on 10th November 2016.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	CONTINUITY OF PATIENT CARE.kw.
6	(transition\$ and (service? or care or clinic? or setting\$ or healthcare or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice? or provider? or program\$ or "adult orient\$" or communit\$ or outpatient\$ or outreach)).ti,ab.
7	((transfer\$ or handoff or handover or "hand over") and (service\$ or care or clinic? or healthcare or setting\$ or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice\$ or provider\$ or communit\$ or outpatient\$ or outreach) and adult\$).ti,ab.
8	(transition\$ adj3 (coordinat\$ or framework? or manag\$ or prepar\$ or plan\$ or protocol\$ or support\$ or trajector\$ or pathway\$ or process\$ or readiness or timing or partnership\$ or program\$ or training or educat\$ or strateg\$ or failure\$ or barrier\$ or system?)).ti,ab.
9	(transition\$ and (MDT\$ or multidisciplinary team\$ or multiprofession\$ or interdisciplinar\$ or key worker\$ or consultant\$ or clinician\$ or specialist\$ or p?ediatrician\$ or social worker\$ or lead\$ or professional\$ or rehabilitation or staff or nurse\$ or therapist\$ or multiagenc\$ or agenc\$)).ti,ab.
10	(transition\$ and (communicat\$ or written or writing or verbal\$ or email\$ or electronic\$ or contact\$)).ti,ab.
11	(transition\$ and (admin\$ or record\$ or appointment\$ or checklist\$ or check list\$ or summar\$ or information or booklet\$ or pamphlet\$ or passport\$)).ti,ab.
12	((("continued care" or "continuing care" or (continuity adj2 care)) adj5 (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$)).ti,ab.
13	(LIFEsplan or Moving on well).ti,ab.

#	Searches
14	or/5-13
15	PATIENT CARE PLANNING.kw. and (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$).ti.
16	("SURVEYS AND QUESTIONNAIRES" or HEALTH CARE SURVEYS).kw.
17	NEEDS ASSESSMENT.kw.
18	16 or 17
19	(survey\$ or questionnaire\$).ti,ab.
20	18 or 19
21	15 and 20
22	14 or 21
23	4 and 22

E.4.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 10th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp CONTINUITY OF PATIENT CARE/
6	(transition\$ and (service? or care or clinic? or setting\$ or healthcare or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice? or provider? or program\$ or "adult orient\$" or communit\$ or outpatient\$ or outreach)).ti,ab.
7	((transfer\$ or handoff or handover or "hand over") and (service\$ or care or clinic? or healthcare or setting\$ or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice\$ or provider\$ or communit\$ or outpatient\$ or outreach) and adult\$).ti,ab.
8	(transition\$ adj3 (coordinat\$ or framework? or manag\$ or prepar\$ or plan\$ or protocol\$ or support\$ or trajector\$ or pathway\$ or process\$ or readiness or timing or partnership\$ or program\$ or training or educat\$ or strateg\$ or failure\$ or barrier\$ or system?)).ti,ab.
9	(transition\$ and (MDT\$ or multidisciplinary team\$ or multiprofession\$ or interdisciplinary\$ or key worker\$ or consultant\$ or clinician\$ or specialist\$ or p?ediatrician\$ or social worker\$ or lead\$ or professional\$ or rehabilitation or staff or nurse\$ or therapist\$ or multiagenc\$ or agenc\$)).ti,ab.
10	(transition\$ and (communicat\$ or written or writing or verbal\$ or email\$ or electronic\$ or contact\$)).ti,ab.
11	(transition\$ and (admin\$ or record\$ or appointment\$ or checklist\$ or check list\$ or summar\$ or information or booklet\$ or pamphlet\$ or passport\$)).ti,ab.
12	((transition\$ and ("continued care" or "continuing care" or (continuity adj2 care))) adj5 (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$)).ti,ab.
13	(LIFEsplan or Moving on well).ti,ab.
14	or/5-13
15	PATIENT CARE PLANNING/ and (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$).ti.
16	"SURVEYS AND QUESTIONNAIRES"/ or HEALTH CARE SURVEYS/
17	NEEDS ASSESSMENT/
18	16 or 17

#	Searches
19	(survey\$ or questionnaire\$).ti,ab.
20	18 or 19
21	15 and 20
22	14 or 21
23	4 and 22
24	limit 23 to english language

E.4.6 Database: Embase

Last searched on **Embase** 1974 to 2016 Week 45 on 10th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	transition to adult care/
6	(transition\$ and (service? or care or clinic? or setting\$ or healthcare or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice? or provider? or program\$ or "adult orient\$" or communit\$ or outpatient\$ or outreach)).ti,ab.
7	((transfer\$ or handoff or handover or "hand over") and (service\$ or care or clinic? or healthcare or setting\$ or hospital? or center\$ or centre\$ or facilit\$ or unit? or department\$ or institution\$ or agenc\$ or hospice\$ or provider\$ or communit\$ or outpatient\$ or outreach) and adult\$).ti,ab.
8	(transition\$ adj3 (coordinat\$ or framework? or manag\$ or prepar\$ or plan\$ or protocol\$ or support\$ or trajector\$ or pathway\$ or process\$ or readiness or timing or partnership\$ or program\$ or training or educat\$ or strateg\$ or failure\$ or barrier\$ or system?)).ti,ab.
9	(transition\$ and (MDT\$ or multidisciplinary team\$ or multiprofession\$ or interdisciplinar\$ or key worker\$ or consultant\$ or clinician\$ or specialist\$ or p?ediatrician\$ or social worker\$ or lead\$ or professional\$ or rehabilitation or staff or nurse\$ or therapist\$ or multiagenc\$ or agenc\$)).ti,ab.
10	(transition\$ and (communicat\$ or written or writing or verbal\$ or email\$ or electronic\$ or contact\$)).ti,ab.
11	(transition\$ and (admin\$ or record\$ or appointment\$ or checklist\$ or check list\$ or summar\$ or information or booklet\$ or pamphlet\$ or passport\$)).ti,ab.
12	((transition\$ and ("continued care" or "continuing care" or (continuity adj2 care))) adj5 (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$)).ti,ab.
13	(LIFEsplan or Moving on well).ti,ab.
14	or/5-13
15	PATIENT CARE PLANNING/ and (adult\$ or p?ediatric\$ or child\$ or adolescent\$ or family or families or carer\$).ti.
16	QUESTIONNAIRE/ or HEALTH CARE SURVEY/
17	NEEDS ASSESSMENT/
18	16 or 17
19	(survey\$ or questionnaire\$).ti,ab.
20	18 or 19
21	15 and 20
22	14 or 21
23	4 and 22
24	limit 23 to english language

#	Searches
25	letter.pt. or LETTER/
26	note.pt.
27	editorial.pt.
28	CASE REPORT/ or CASE STUDY/
29	(letter or comment*).ti.
30	or/25-29
31	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
32	30 not 31
33	ANIMAL/ not HUMAN/
34	NONHUMAN/
35	exp ANIMAL EXPERIMENT/
36	exp EXPERIMENTAL ANIMAL/
37	ANIMAL MODEL/
38	exp RODENT/
39	(rat or rats or mouse or mice).ti.
40	or/32-39
41	24 ot 40

E.5 What are the non-lower-respiratory complications of cystic fibrosis in infants, children, young people and adults?

E.5.1 Database: Medline

Last searched on Ovid MEDLINE(R) 1946 to October Week 4 2016 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	1 or 2 or 3
5	PREVALENCE/
6	INCIDENCE/
7	exp MODELS, STATISTICAL/
8	(prevalen\$ or incidence? or model\$ or rate? or epidemiolog\$).ti.
9	((prevalen\$ or incidence? or transversal\$) adj3 (study or studies)).ti,ab.
10	COHORT STUDIES/
11	(cohort adj3 (study or studies)).ti,ab.
12	(Cohort adj3 analy\$).ti,ab.
13	FOLLOW-UP STUDIES/
14	(Follow\$ up adj3 (study or studies)).ti,ab.
15	LONGITUDINAL STUDIES/
16	longitudinal\$.ti,ab.
17	PROSPECTIVE STUDIES/
18	prospective\$.ti,ab.
19	RETROSPECTIVE STUDIES/
20	retrospective\$.ti,ab.
21	CROSS-SECTIONAL STUDIES/

#	Searches
22	cross-sectional\$.ti,ab.
23	MULTICENTER STUDIES/
24	((multicent\$ or multi\$ cent\$) adj3 (study or studies)).ti,ab.
25	REGISTRIES/
26	(registr\$ or register?).ti,ab.
27	or/5-26
28	AGE FACTORS/
29	AGE OF ONSET/
30	TIME TO TREATMENT/
31	(age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
32	(disease adj3 (duration or onset)).ti,ab.
33	or/28-32
34	27 or 33
35	Malnutrition/ep
36	malnutrition.ti.
37	nutritional deficienc\$.ab,ti.
38	*Nutritional Status/
39	nutrition\$ status.ab,ti.
40	or/35-39
41	Growth Disorders/
42	(Impair\$ adj2 growth).ab,ti.
43	stature.ab,ti.
44	height velocity.ab,ti.
45	stunt\$.ab,ti.
46	or/41-45
47	Puberty, Delayed/
48	(puberty adj2 delay\$).ab,ti.
49	Sexual Maturation/
50	(sexual adj2 matur\$).ab,ti.
51	or/47-50
52	Distal Intestinal Obstruction Syndrome.ab,ti.
53	DIOS.ab,ti.
54	Intestinal Obstruction/
55	(Intestin\$ adj2 Obstruct\$).ab,ti.
56	or/52-55
57	exp Abdominal Pain/
58	(abdom\$ adj2 pain\$).ti,ab.
59	exp Gastrointestinal Diseases/co
60	Intussusception/
61	intus?usception?.ab,ti.
62	(intestin\$ adj2 invagination?).ab,ti.
63	or/57-62
64	Meconium/ and Ileus/
65	(meconium and ileus).ab,ti.
66	(bowel\$ adj2 obstruct\$).ab,ti.

#	Searches
67	64 or 65 or 66
68	Intestinal Volvulus/
69	volvulus.ab,ti.
70	68 or 69
71	Diabetes Mellitus/ep
72	Diabetes Mellitus, Type 1/ep
73	Diabetes Mellitus, Type 2/ep
74	Diabetes Complications/
75	Hyperglycemia/ep
76	Hypoglycemia/ep
77	Glucose Intolerance/ep
78	*Insulin Resistance/
79	(relate\$ adj2 diabet\$).ab,ti.
80	CFRD.ab,ti.
81	or/71-80
82	RESPIRATORY TRACT INFECTIONS/ep
83	Respiratory Tract Diseases/ep
84	((upper respiratory or upper airway\$ or (larynx\$ or glotti\$ or epiglotti\$ or subglotti\$ or oropharynx\$ or tonsil\$ or hypopharynx\$ or pharynx\$ or throat or vocal cord or vocal fold or voice box or nasopharynx\$ or paranasal or nasal or nose or sinus or sinonasal or nasosinus)) adj1 (disease\$ or disorder\$ or dysfunction\$ or adduction\$ or paralysis\$)).ab,ti.
85	Nose Diseases/co, ep
86	Paranasal Sinus Diseases/co, ep
87	Nasal Polyps/
88	(Nasal adj2 polyp\$).ab,ti.
89	exp Rhinitis/co, ep
90	(chronic rhinitis or chronic rhinitides or (chronic adj2 catarrh)).ab,ti.
91	exp Sinusitis/co, ep
92	chronic sinusitis.ab,ti.
93	chronic rhinosinusitis.ab,ti.
94	sinus hypoplasia.ab,ti.
95	Pharyngeal Diseases/co, ep
96	Nasopharyngeal Diseases/co, ep
97	Laryngeal Diseases/co, ep
98	exp Vocal Cord Dysfunction/
99	Vocal Cord Paralysis/
100	exp Voice Disorders/co
101	or/82-100
102	Musculoskeletal Diseases/
103	musculoskeletal.ab,ti.
104	Osteoarthropathy, Secondary Hypertrophic/
105	(hypertrophic adj2 osteoarthropath\$ adj2 pulmonary).ab,ti.
106	(finger? adj2 club\$).ab,ti.
107	Kyphosis/
108	kyphos?s.ab,ti.

#	Searches
109	Scoliosis/
110	scolios?s.ab,ti.
111	Joint Diseases/
112	(joint? adj2 disease?).ab,ti.
113	Arthralgia/
114	arthralgia?.ab,ti.
115	Polyarthralgia?.ab,ti.
116	(joint? adj2 pain?).ab,ti.
117	Synovitis/
118	synoviti\$.ab,ti.
119	Arthritis/
120	arthriti\$.ab,ti.
121	Bone Density/
122	(Bone? adj2 (densit\$ or content?)).ab,ti.
123	Osteoporosis/
124	or/102-123
125	Urinary Incontinence, Stress/
126	(stress adj2 incontinen\$).ab,ti.
127	125 or 126
128	Bartter Syndrome/
129	pseudo bartter\$ syndrome.ab,ti.
130	pseudobartter\$ syndrome.ab,ti.
131	128 or 129 or 130
132	exp Renal Insufficiency/
133	exp kidney diseases/
134	((kidney\$ or renal) adj2 (complicat\$ or disease\$ or insufficien\$ or fail\$ or dysfunction\$ or amyloidosis or stone\$ or impair\$)).ab,ti.
135	nephrolithiasis.ab,ti.
136	nephrocalcinosis.ab,ti.
137	nephritis.ab,ti.
138	or/132-137
139	Liver Diseases/
140	(liver adj2 disease?).ab,ti.
141	(liver adj2 dysfunction?).ab,ti.
142	Liver Cirrhosis/
143	(liver adj2 cirrhos?s).ab,ti.
144	(liver adj2 fibros?s).ab,ti.
145	(hepatic adj2 cirrhos?s).ab,ti.
146	Hypertension, Portal/
147	(portal adj2 hypertension?).ab,ti.
148	cruveilhier baumgarten syndrome.ab,ti.
149	or/139-148
150	Exocrine Pancreatic Insufficiency/
151	(exocrine adj2 pancreatic adj2 insufficienc\$).ab,ti.
152	150 or 151
153	Infertility/

#	Searches
154	Infertility, Male/
155	Aspermia/
156	Asthenozoospermia/
157	Azoospermia/
158	Oligospermia/
159	Sertoli Cell-Only Syndrome/
160	Infertility, Female/
161	sterility.ab,ti.
162	subfertility.ab,ti.
163	sub-fertility.ab,ti.
164	infertility.ab,ti.
165	Aspermia.ab,ti.
166	Asthenozoospermia.ab,ti.
167	Azoospermia.ab,ti.
168	Oligospermia.ab,ti.
169	sertoli cell only syndrome.ab,ti.
170	germinal cell aplasia.ab,ti.
171	del castillo syndrome.ab,ti.
172	or/153-171
173	4 and 34 and 40
174	4 and 34 and 46
175	4 and 34 and 51
176	4 and 34 and 56
177	4 and 34 and 63
178	4 and 34 and 67
179	4 and 34 and 70
180	4 and 34 and 81
181	4 and 34 and 101
182	4 and 34 and 124
183	4 and 34 and 127
184	4 and 34 and 131
185	4 and 34 and 138
186	4 and 34 and 149
187	4 and 34 and 152
188	4 and 34 and 172
189	or/173-188
190	limit 189 to english language
191	LETTER/
192	EDITORIAL/
193	NEWS/
194	exp HISTORICAL ARTICLE/
195	ANECDOTES AS TOPIC/
196	COMMENT/
197	CASE REPORT/
198	(letter or comment* or abstracts).ti.

#	Searches
199	or/191-198
200	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
201	199 not 200
202	ANIMALS/ not HUMANS/
203	exp ANIMALS, LABORATORY/
204	exp ANIMAL EXPERIMENTATION/
205	exp MODELS, ANIMAL/
206	exp RODENTIA/
207	(rat or rats or mouse or mice).ti.
208	or/201-207
209	190 not 208

E.5.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations November 07, 2016 on 8th November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	1 or 2
4	malnutrition.ti.
5	nutritional deficienc\$.ab,ti.
6	nutrition\$ status.ab,ti.
7	or/4-6
8	(Impair\$ adj2 growth).ab,ti.
9	stature.ab,ti.
10	height velocity.ab,ti.
11	stunt\$.ab,ti.
12	or/8-11
13	(puberty adj2 delay\$).ab,ti.
14	matur\$.ab,ti.
15	13 or 14
16	Distal Intestinal Obstruction Syndrome.ab,ti.
17	DIOS.ab,ti.
18	(Intestin\$ adj2 Obstruct\$).ab,ti.
19	or/16-18
20	(abdom\$ adj2 pain\$).ti,ab.
21	intus?usception?.ab,ti.
22	(intestin\$ adj2 invagination?).ab,ti.
23	or/20-22
24	(meconium and ileus).ab,ti.
25	(bowel\$ adj2 obstruct\$).ab,ti.
26	24 or 25
27	volvulus.ab,ti.
28	(relate\$ adj2 diabet\$).ab,ti.
29	CFRD.ab,ti.

#	Searches
30	29 or "30".mp. [mp=title, abstract, original title, name of substance word, subject heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier]
31	((upper respiratory or upper airway\$ or (larynx\$ or glotti\$ or epiglotti\$ or subglotti\$ or oropharynx\$ or tonsil\$ or hypopharynx\$ or pharynx\$ or throat or vocal cord or vocal fold or voice box or nasopharynx\$ or paranasal or nasal or nose or sinus or sinonasal or nasosinus)) adj1 (disease\$ or disorder\$ or dysfunction\$ or adduction\$ or paralys\$)).ab,ti.
32	(Nasal adj2 polyp\$).ab,ti.
33	(chronic rhinitis or chronic rhinitides or (chronic adj2 catarrh)).ab,ti.
34	nasosinusitis.ab,ti.
35	chronic sinusitis.ab,ti.
36	chronic rhinosinusitis.ab,ti.
37	sinus hypoplasia.ab,ti.
38	or/31-37
39	musculoskeletal.ab,ti.
40	(hypertrophic adj2 osteoarthropath\$ adj2 pulmonary).ab,ti.
41	(finger? adj2 club\$).ab,ti.
42	kyphos?s.ab,ti.
43	scolios?s.ab,ti.
44	(joint? adj2 disease?).ab,ti.
45	arthralgia?.ab,ti.
46	(joint? adj2 pain?).ab,ti.
47	synoviti\$.ab,ti.
48	arthriti\$.ab,ti.
49	(Bone? adj2 (densit\$ or content?)).ab,ti.
50	or/39-49
51	(stress adj2 incontinen\$).ab,ti.
52	((kidney\$ or renal) adj2 (complicat\$ or disease\$ or insufficien\$ or fail\$ or dysfunction\$ or amyloidosis or stone\$ or impair\$)).ab,ti.
53	nephrolithiasis.ab,ti.
54	nephrocalcinosis.ab,ti.
55	nephritis.ab,ti.
56	or/52-55
57	(liver adj2 disease?).ab,ti.
58	(liver adj2 dysfunction?).ab,ti.
59	(liver adj2 cirrhos?s).ab,ti.
60	(liver adj2 fibros?s).ab,ti.
61	(hepatic adj2 cirrhos?s).ab,ti.
62	(portal adj2 hypertension?).ab,ti.
63	cruveilhier baumgarten syndrome.ab,ti.
64	(exocrine adj2 pancreatic adj2 insufficienc\$).ab,ti.
65	or/57-64
66	sterility.ab,ti.
67	subfertility.ab,ti.
68	sub-fertility.ab,ti.
69	infertility.ab,ti.

#	Searches
70	Aspermia.ab,ti.
71	Asthenozoospermia.ab,ti.
72	Azoospermia.ab,ti.
73	Oligospermia.ab,ti.
74	sertoli cell only syndrome.ab,ti.
75	germinal cell aplasia.ab,ti.
76	del castillo syndrome.ab,ti.
77	or/66-76
78	3 and 7
79	3 and 12
80	3 and 15
81	3 and 19
82	3 and 23
83	3 and 26
84	3 and 27
85	3 and 30
86	3 and 38
87	3 and 50
88	3 and 51
89	3 and 56
90	3 and 65
91	or/78-90

E.5.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials**
 October 2016 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	1 or 2 or 3
5	Malnutrition.kw.
6	malnutrition.ti.
7	nutritional deficienc\$.ab,ti.
8	Nutritional Status.kw.
9	nutrition\$ status.ab,ti.
10	or/5-9
11	Growth Disorders.kw.
12	(Impair\$ adj2 growth).ab,ti.
13	stature.ab,ti.
14	height velocity.ab,ti.
15	stunt\$.ab,ti.
16	or/11-15
17	Puberty.kw.
18	(puberty adj2 delay\$.ab,ti.

#	Searches
19	Maturation.kw.
20	matur\$.ab,ti.
21	or/17-20
22	Distal Intestinal Obstruction Syndrome.ab,ti.
23	DIOS.ab,ti.
24	Intestinal Obstruction.kw.
25	(Intestin\$ adj2 Obstruct\$).ab,ti.
26	or/22-25
27	Abdominal Pain.kw.
28	(abdom\$ adj2 pain\$).ti,ab.
29	Gastrointestinal Diseases.kw.
30	Intussusception.kw.
31	intus?usception?.ab,ti.
32	(intestin\$ adj2 invagination?).ab,ti.
33	or/27-32
34	(Meconium and Ileus).kw.
35	(meconium and ileus).ab,ti.
36	(bowel\$ adj2 obstruct\$).ab,ti.
37	34 or 35 or 36
38	(intestinal or intestine or intestines).kw.
39	volvulus.ab,ti.
40	38 or 39
41	Diabetes Mellitus.kw.
42	Diabetes Mellitus, Type 1.kw.
43	Diabetes Mellitus, Type 2.kw.
44	Diabetes Complications.kw.
45	Hyperglycemia.kw.
46	Hypoglycemia.kw.
47	Glucose Intolerance.kw.
48	Insulin Resistance.kw.
49	(relate\$ adj2 diabet\$).ab,ti.
50	CFRD.ab,ti.
51	or/41-50
52	RESPIRATORY TRACT INFECTIONS.kw.
53	Respiratory Tract Diseases.kw.
54	((upper respiratory or upper airway\$ or (larynx\$ or glotti\$ or epiglotti\$ or subglotti\$ or oropharynx\$ or tonsil\$ or hypopharynx\$ or pharynx\$ or throat or vocal cord or vocal fold or voice box or nasopharynx\$ or paranasal or nasal or nose or sinus or sinonasal or nasosinus)) adj1 (disease\$ or disorder\$ or dysfunction\$ or adduction\$ or paralysis\$)).ab,ti.
55	Nose Diseases.kw.
56	(nasal and polyps).kw.
57	(Nasal adj2 polyp\$).ab,ti.
58	Rhinitis.kw.
59	(chronic rhinitis or chronic rhinitides or (chronic adj2 catarrh)).ab,ti.
60	Sinusitis.kw.

#	Searches
61	chronic sinusitis.ab,ti.
62	chronic rhinosinusitis.ab,ti.
63	sinus hypoplasia.ab,ti.
64	Pharyngeal Diseases.kw.
65	nasosinusitis.kw.
66	Laryngeal Diseases.kw.
67	Vocal Cord.kw.
68	Vocal Cord Paralysis.kw.
69	Voice Disorders.kw.
70	or/52-69
71	Musculoskeletal Diseases.kw.
72	musculoskeletal.ab,ti.
73	(hypertrophic adj2 osteoarthropath\$ adj2 pulmonary).ab,ti.
74	(finger? adj2 club\$).ab,ti.
75	Kyphosis.kw.
76	kyphos?s.ab,ti.
77	Scoliosis.kw.
78	scolios?s.ab,ti.
79	Joint Diseases.kw.
80	(joint? adj2 disease?).ab,ti.
81	Arthralgia.kw.
82	arthralgia?.ab,ti.
83	(joint? adj2 pain?).ab,ti.
84	Synovitis.kw.
85	synoviti\$.ab,ti.
86	Arthritis.kw.
87	arthriti\$.ab,ti.
88	Bone Density.kw.
89	(Bone? adj2 (densit\$ or content?)).ab,ti.
90	Osteoporosis.kw.
91	or/71-90
92	Urinary Incontinence, Stress.kw.
93	(stress adj2 incontinen\$).ab,ti.
94	92 or 93
95	Renal Insufficiency.kw.
96	Kidney diseases.kw.
97	((kidney\$ or renal) adj2 (complicat\$ or disease\$ or insufficien\$ or fail\$ or dysfunction\$ or amyloidosis or stone\$ or impair\$)).ab,ti.
98	nephrolithiasis.ab,ti.
99	nephrocalcinosis.ab,ti.
100	nephritis.ab,ti.
101	or/95-100
102	Liver Diseases.kw.
103	(liver adj2 disease?).ab,ti.
104	(liver adj2 dysfunction?).ab,ti.
105	Liver Cirrhosis.kw.

#	Searches
106	(liver adj2 cirrhos?s).ab,ti.
107	(liver adj2 fibros?s).ab,ti.
108	(hepatic adj2 cirrhos?s).ab,ti.
109	Hypertension, Portal.kw.
110	(portal adj2 hypertension?).ab,ti.
111	cruveilhier baumgarten syndrome.ab,ti.
112	or/102-111
113	Exocrine Pancreatic Insufficiency.kw.
114	(exocrine adj2 pancreatic adj2 insufficienc\$).ab,ti.
115	113 or 114
116	Infertility.kw.
117	Infertility, Male.kw.
118	Asthenozoospermia.kw.
119	Azoospermia.kw.
120	Oligospermia.kw.
121	Infertility, Female.kw.
122	sterility.ab,ti.
123	subfertility.ab,ti.
124	sub-fertility.ab,ti.
125	infertility.ab,ti.
126	Aspermia.ab,ti.
127	Asthenozoospermia.ab,ti.
128	Azoospermia.ab,ti.
129	Oligospermia.ab,ti.
130	sertoli cell only syndrome.ab,ti.
131	germinal cell aplasia.ab,ti.
132	del castillo syndrome.ab,ti.
133	or/116-132
134	4 and 10
135	4 and 16
136	4 and 21
137	4 and 26
138	4 and 33
139	4 and 37
140	4 and 40
141	4 and 51
142	4 and 70
143	4 and 91
144	4 and 94
145	4 and 101
146	4 and 112
147	4 and 115
148	4 and 133
149	or/134-148

E.5.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to November 07, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects 1st Quarter 2015** on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	1 or 2 or 3
5	Malnutrition.kw.
6	malnutrition.ti.
7	nutritional deficienc\$.ab,ti.
8	Nutritional Status.kw.
9	nutrition\$ status.ab,ti.
10	or/5-9
11	Growth Disorders.kw.
12	(Impair\$ adj2 growth).ab,ti.
13	stature.ab,ti.
14	height velocity.ab,ti.
15	stunt\$.ab,ti.
16	or/11-15
17	Puberty.kw.
18	(puberty adj2 delay\$.ab,ti.
19	Maturation.kw.
20	matur\$.ab,ti.
21	or/17-20
22	Distal Intestinal Obstruction Syndrome.ab,ti.
23	DIOS.ab,ti.
24	Intestinal Obstruction.kw.
25	(Intestin\$ adj2 Obstruct\$).ab,ti.
26	or/22-25
27	Abdominal Pain.kw.
28	(abdom\$ adj2 pain\$).ti,ab.
29	Gastrointestinal Diseases.kw.
30	Intussusception.kw.
31	intus?usception?.ab,ti.
32	(intestin\$ adj2 invagination?).ab,ti.
33	or/27-32
34	(Meconium and Ileus).kw.
35	(meconium and ileus).ab,ti.
36	(bowel\$ adj2 obstruct\$).ab,ti.
37	34 or 35 or 36
38	(intestinal or intestine or intestines).kw.
39	volvulus.ab,ti.
40	38 or 39

#	Searches
41	Diabetes Mellitus.kw.
42	Diabetes Mellitus, Type 1.kw.
43	Diabetes Mellitus, Type 2.kw.
44	Diabetes Complications.kw.
45	Hyperglycemia.kw.
46	Hypoglycemia.kw.
47	Glucose Intolerance.kw.
48	Insulin Resistance.kw.
49	(relate\$ adj2 diabet\$).ab,ti.
50	CFRD.ab,ti.
51	or/41-50
52	RESPIRATORY TRACT INFECTIONS.kw.
53	Respiratory Tract Diseases.kw.
54	((upper respiratory or upper airway\$ or (larynx\$ or glottis\$ or epiglottis\$ or subglottis\$ or oropharynx\$ or tonsil\$ or hypopharynx\$ or pharynx\$ or throat or vocal cord or vocal fold or voice box or nasopharynx\$ or paranasal or nasal or nose or sinus or sinonasal or nasosinus)) adj1 (disease\$ or disorder\$ or dysfunction\$ or adduction\$ or paralysis\$)).ab,ti.
55	Nose Diseases.kw.
56	Paranasal Sinus Diseases.kw.
57	(nasal and polyps).kw.
58	(Nasal adj2 polyp\$).ab,ti.
59	Rhinitis.kw.
60	(chronic rhinitis or chronic rhinitides or (chronic adj2 catarrh)).ab,ti.
61	Sinusitis.kw.
62	chronic sinusitis.ab,ti.
63	chronic rhinosinusitis.ab,ti.
64	sinus hypoplasia.ab,ti.
65	Pharyngeal Diseases.kw.
66	nasopharyngitis.kw.
67	Laryngeal Diseases.kw.
68	Vocal Cord Dysfunction.kw.
69	Vocal Cord Paralysis.kw.
70	Voice Disorders.kw.
71	or/52-70
72	Musculoskeletal Diseases.kw.
73	musculoskeletal.ab,ti.
74	(hypertrophic adj2 osteoarthropath\$ adj2 pulmonary).ab,ti.
75	(finger? adj2 club\$).ab,ti.
76	Kyphosis.kw.
77	kyphos?s.ab,ti.
78	Scoliosis.kw.
79	scolios?s.ab,ti.
80	Joint Diseases.kw.
81	(joint? adj2 disease?).ab,ti.
82	Arthralgia.kw.

#	Searches
83	arthralgia?.ab,ti.
84	(joint? adj2 pain?).ab,ti.
85	Synovitis.kw.
86	synoviti\$.ab,ti.
87	Arthritis.kw.
88	arthriti\$.ab,ti.
89	Bone Density.kw.
90	(Bone? adj2 (densit\$ or content?)).ab,ti.
91	Osteoporosis.kw.
92	or/72-91
93	Urinary Incontinence, Stress.kw.
94	(stress adj2 incontinen\$).ab,ti.
95	93 or 94
96	Renal Insufficiency.kw.
97	Kidney diseases.kw.
98	((kidney\$ or renal) adj2 (complicat\$ or disease\$ or insufficien\$ or fail\$ or dysfunction\$ or amyloidosis or stone\$ or impair\$)).ab,ti.
99	nephrolithiasis.ab,ti.
100	nephrocalcinosis.ab,ti.
101	nephritis.ab,ti.
102	or/96-101
103	Liver Diseases.kw.
104	(liver adj2 disease?).ab,ti.
105	(liver adj2 dysfunction?).ab,ti.
106	Liver Cirrhosis.kw.
107	(liver adj2 cirrhos?s).ab,ti.
108	(liver adj2 fibros?s).ab,ti.
109	(hepatic adj2 cirrhos?s).ab,ti.
110	Hypertension, Portal.kw.
111	(portal adj2 hypertension?).ab,ti.
112	cruveilhier baumgarten syndrome.ab,ti.
113	or/103-112
114	Exocrine Pancreatic Insufficiency.kw.
115	(exocrine adj2 pancreatic adj2 insufficienc\$).ab,ti.
116	114 or 115
117	Infertility.kw.
118	Infertility, Male.kw.
119	Asthenozoospermia.kw.
120	Azoospermia.kw.
121	Oligospermia.kw.
122	Infertility, Female.kw.
123	sterility.ab,ti.
124	subfertility.ab,ti.
125	sub-fertility.ab,ti.
126	infertility.ab,ti.
127	Aspermia.ab,ti.

#	Searches
128	Asthenozoospermia.ab,ti.
129	Azoospermia.ab,ti.
130	Oligospermia.ab,ti.
131	sertoli cell only syndrome.ab,ti.
132	germinal cell aplasia.ab,ti.
133	del castillo syndrome.ab,ti.
134	or/117-133
135	4 and 10
136	4 and 16
137	4 and 21
138	4 and 26
139	4 and 33
140	4 and 37
141	4 and 40
142	4 and 51
143	4 and 71
144	4 and 92
145	4 and 95
146	4 and 102
147	4 and 113
148	4 and 116
149	4 and 134
150	or/135-149

E.5.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	1 or 2 or 3
5	Malnutrition/
6	malnutrition.ti.
7	nutritional deficienc\$.ab,ti.
8	Nutritional Status/
9	nutrition\$ status.ab,ti.
10	or/5-9
11	Growth Disorders/
12	(Impair\$ adj2 growth).ab,ti.
13	stature.ab,ti.
14	height velocity.ab,ti.
15	stunt\$.ab,ti.
16	or/11-15
17	Puberty, Delayed/

#	Searches
18	(puberty adj2 delay\$).ab,ti.
19	Sexual Maturation/
20	(sexual adj2 matur\$).ab,ti.
21	or/17-20
22	Distal Intestinal Obstruction Syndrome.ab,ti.
23	DIOS.ab,ti.
24	Intestinal Obstruction/
25	(Intestin\$ adj2 Obstruct\$).ab,ti.
26	or/22-25
27	exp Abdominal Pain/
28	(abdom\$ adj2 pain\$).ti,ab.
29	exp Gastrointestinal Diseases/
30	Intussusception/
31	intus?usception?.ab,ti.
32	(intestin\$ adj2 invagination?).ab,ti.
33	or/27-32
34	Meconium/ and Ileus/
35	(meconium and ileus).ab,ti.
36	(bowel\$ adj2 obstruct\$).ab,ti.
37	34 or 35 or 36
38	Intestinal Volvulus/
39	volvulus.ab,ti.
40	38 or 39
41	Diabetes Mellitus/
42	Diabetes Mellitus, Type 1/
43	Diabetes Mellitus, Type 2/
44	Diabetes Complications/
45	Hyperglycemia/
46	Hypoglycemia/
47	Glucose Intolerance/
48	Insulin Resistance/
49	(relate\$ adj2 diabet\$).ab,ti.
50	CFRD.ab,ti.
51	or/41-50
52	RESPIRATORY TRACT INFECTIONS/
53	Respiratory Tract Diseases/
54	((upper respiratory or upper airway\$ or (larynx\$ or glottis\$ or epiglottis\$ or subglottis\$ or oropharynx\$ or tonsil\$ or hypopharynx\$ or pharynx\$ or throat or vocal cord or vocal fold or voice box or nasopharynx\$ or paranasal or nasal or nose or sinus or sinonasal or nasosinus)) adj1 (disease\$ or disorder\$ or dysfunction\$ or adduction\$ or paralys\$)).ab,ti.
55	Nose Diseases/
56	Paranasal Sinus Diseases/
57	Nasal Polyps/
58	(Nasal adj2 polyp\$).ab,ti.
59	exp Rhinitis/
60	(chronic rhinitis or chronic rhinitides or (chronic adj2 catarrh)).ab,ti.

#	Searches
61	exp Sinusitis/
62	chronic sinusitis.ab,ti.
63	chronic rhinosinusitis.ab,ti.
64	sinus hypoplasia.ab,ti.
65	Pharyngeal Diseases/
66	Nasopharyngeal Diseases/
67	Laryngeal Diseases/
68	exp Vocal Cord Dysfunction/
69	Vocal Cord Paralysis/
70	exp Voice Disorders/
71	or/52-70
72	Musculoskeletal Diseases/
73	musculoskeletal.ab,ti.
74	Osteoarthropathy, Secondary Hypertrophic/
75	(hypertrophic adj2 osteoarthropath\$ adj2 pulmonary).ab,ti.
76	(finger? adj2 club\$).ab,ti.
77	Kyphosis/
78	kyphos?s.ab,ti.
79	Scoliosis/
80	scolios?s.ab,ti.
81	Joint Diseases/
82	(joint? adj2 disease?).ab,ti.
83	Arthralgia/
84	arthralgia?.ab,ti.
85	Polyarthralgia?.ab,ti.
86	(joint? adj2 pain?).ab,ti.
87	Synovitis/
88	synoviti\$.ab,ti.
89	Arthritis/
90	arthriti\$.ab,ti.
91	Bone Density/
92	(Bone? adj2 (densit\$ or content?)).ab,ti.
93	Osteoporosis/
94	or/72-93
95	Urinary Incontinence, Stress/
96	(stress adj2 incontinen\$).ab,ti.
97	95 or 96
98	Bartter Syndrome/
99	pseudo bartter\$ syndrome.ab,ti.
100	pseudobartter\$ syndrome.ab,ti.
101	98 or 99 or 100
102	exp Renal Insufficiency/
103	exp kidney diseases/
104	((kidney\$ or renal) adj2 (complicat\$ or disease\$ or insufficien\$ or fail\$ or dysfunction\$ or amyloidosis or stone\$ or impair\$)).ab,ti.
105	nephrolithiasis.ab,ti.

#	Searches
106	nephrocalcinosis.ab,ti.
107	nephritis.ab,ti.
108	or/102-107
109	Liver Diseases/
110	(liver adj2 disease?).ab,ti.
111	(liver adj2 dysfunction?).ab,ti.
112	Liver Cirrhosis/
113	(liver adj2 cirrhos?s).ab,ti.
114	(liver adj2 fibros?s).ab,ti.
115	(hepatic adj2 cirrhos?s).ab,ti.
116	Hypertension, Portal/
117	(portal adj2 hypertension?).ab,ti.
118	cruveilhier baumgarten syndrome.ab,ti.
119	or/109-118
120	Exocrine Pancreatic Insufficiency/
121	(exocrine adj2 pancreatic adj2 insufficienc\$).ab,ti.
122	120 or 121
123	Infertility/
124	Infertility, Male/
125	Aspermia/
126	Asthenozoospermia/
127	Azoospermia/
128	Oligospermia/
129	Sertoli Cell-Only Syndrome/
130	Infertility, Female/
131	sterility.ab,ti.
132	subfertility.ab,ti.
133	sub-fertility.ab,ti.
134	infertility.ab,ti.
135	Aspermia.ab,ti.
136	Asthenozoospermia.ab,ti.
137	Azoospermia.ab,ti.
138	Oligospermia.ab,ti.
139	sertoli cell only syndrome.ab,ti.
140	germinal cell aplasia.ab,ti.
141	del castillo syndrome.ab,ti.
142	or/123-141
143	4 and 10
144	4 and 16
145	4 and 21
146	4 and 26
147	4 and 33
148	4 and 37
149	4 and 40
150	4 and 51

#	Searches
151	4 and 71
152	4 and 94
153	4 and 97
154	4 and 101
155	4 and 108
156	4 and 119
157	4 and 122
158	4 and 142
159	or/143-158
160	limit 159 to english language

E.5.6 Database: Embase

Last searched on **Embase** 1974 to 2016 Week 45 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	mucov\$.ti,ab.
3	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
4	or/1-3
5	EPIDEMIOLOGY/
6	epidemiolog\$.tw.
7	PREVALENCE/
8	prevalence.tw.
9	cross sectional.tw.
10	INCIDENCE/
11	incidence.tw.
12	or/5-11
13	exp CASE CONTROL STUDY/
14	(case\$ adj2 control\$).tw.
15	cohort analysis/
16	cohort.tw.
17	LONGITUDINAL STUDY/
18	longitudinal\$.ti,ab.
19	FOLLOW UP/
20	(Follow\$ up adj3 (study or studies)).ti,ab.
21	PROSPECTIVE STUDY/
22	prospective\$.ti,ab.
23	retrospective study/
24	retrospective\$.ti,ab.
25	CROSS-SECTIONAL STUDY/
26	cross-sectional\$.ti,ab.
27	"MULTICENTER STUDY (TOPIC)"/
28	((multicent\$ or multi\$ cent\$) adj3 (study or studies)).ti,ab.
29	REGISTER/
30	(registr\$ or register?).ti,ab.
31	or/13-30

#	Searches
32	AGE/
33	ONSET AGE/
34	TIME TO TREATMENT/
35	(age\$ adj4 (factor\$ or onset or diagnos\$ or treatment\$)).ti,ab.
36	(disease adj3 (duration or onset)).ti,ab.
37	or/32-36
38	12 or 31 or 37
39	EXP MALNUTRITION/co, ep [Complication, Epidemiology]
40	malnutrition.ti.
41	nutritional deficienc\$.ab,ti.
42	EXP NUTRITIONAL STATUS/
43	nutrition\$ status.ab,ti.
44	or/39-43
45	GROWTH DISORDER/
46	(Impair\$ adj2 growth).ab,ti.
47	stature.ab,ti.
48	height velocity.ab,ti.
49	stunt\$.ab,ti.
50	or/45-49
51	DELAYED PUBERTY/
52	(puberty adj2 delay\$).ab,ti.
53	SEXUAL MATURATION/
54	(sexual adj2 matur\$).ab,ti.
55	or/51-54
56	Distal Intestinal Obstruction Syndrome.ab,ti.
57	DIOS.ab,ti.
58	EXP INTESTINE OBSTRUCTION/co, ep [Complication, Epidemiology]
59	(Intestin\$ adj2 Obstruct\$).ab,ti.
60	intus?usception?.ab,ti.
61	(intestin\$ adj2 invagination?).ab,ti.
62	EXP GASTROINTESTINAL DISEASE/co, ep [Complication, Epidemiology]
63	EXP ABDOMINAL PAIN/co, ep [Complication, Epidemiology]
64	(abdom\$ adj2 pain\$).ti,ab.
65	(intest\$ adj2 volvulus).ab,ti.
66	MECONIUM ILEUS/
67	(meconium and ileus).ab,ti.
68	(bowel\$ adj2 obstruct\$).ab,ti.
69	or/56-68
70	DIABETES MELLITUS/co, ep [Complication, Epidemiology]
71	HYPERGLYCEMIA/co, ep [Complication, Epidemiology]
72	HYPOGLYCEMIA/co, ep [Complication, Epidemiology]
73	GLUCOSE INTOLERANCE/co, ep [Complication, Epidemiology]
74	INSULIN RESISTANCE/co, ep [Complication, Epidemiology]
75	(relate\$ adj2 diabet\$).ab,ti.
76	CFRD.ab,ti.

#	Searches
77	or/70-76
78	EXP UPPER RESPIRATORY TRACT INFECTION/co, ep [Complication, Epidemiology]
79	((upper respiratory or upper airway\$ or (larynx\$ or glottis\$ or epiglottis\$ or subglottis\$ or oropharynx\$ or tonsil\$ or hypopharynx\$ or pharynx\$ or throat or vocal cord or vocal fold or voice box or nasopharynx\$ or paranasal or nasal or nose or sinus or sinonasal or nasosinus)) adj1 (disease\$ or disorder\$ or dysfunction\$ or adduction\$ or paralysis\$)).ab,ti.
80	NOSE DISEASE/co, ep [Complication, Epidemiology]
81	PARANASAL SINUS DISEASE/co, ep [Complication, Epidemiology]
82	NOSE POLYP/co, ep [Complication, Epidemiology]
83	(Nasal adj2 polyp\$).ab,ti.
84	EXP RHINITIS/co, ep [Complication, Epidemiology]
85	(chronic rhinitis or chronic rhinitides or (chronic adj2 catarrh)).ab,ti.
86	CHRONIC SINUSITIS/co, ep [Complication, Epidemiology]
87	CHRONIC RHINOSINUSITIS/co, ep [Complication, Epidemiology]
88	PARANASAL SINUSITIS/co, ep [Complication, Epidemiology]
89	(chronic adj (sinusitis or rhinosinusitis)).ab,ti.
90	sinus hypoplasia.ab,ti.
91	PHARYNX DISEASE/co, ep [Complication, Epidemiology]
92	LARYNX DISORDER/co, ep [Complication, Epidemiology]
93	VOCAL CORD DISORDER/co, ep [Complication, Epidemiology]
94	VOCAL CORD PARALYSIS/co, ep [Complication, Epidemiology]
95	VOICE DISORDER/co, ep [Complication, Epidemiology]
96	or/78-95
97	MUSCULOSKELETAL DISEASE/co, ep [Complication, Epidemiology]
98	musculoskeletal.ab,ti.
99	HYPERTROPHIC OSTEOARTHROPATHY/
100	(hypertrophic adj2 osteoarthropath\$ adj2 pulmonary).ab,ti.
101	(finger? adj2 club\$).ab,ti.
102	KYPHOSIS/
103	kyphos?s.ab,ti.
104	EXP SCOLIOSIS/co, ep [Complication, Epidemiology]
105	scolios?s.ab,ti.
106	ARTHROPATHY/co, ep [Complication, Epidemiology]
107	(joint? adj2 disease?).ab,ti.
108	ARTHRALGIA/co, ep [Complication, Epidemiology]
109	arthralgia?.ab,ti.
110	Polyarthralgia?.ab,ti.
111	(joint? adj2 pain?).ab,ti.
112	SYNOVITIS/co, ep [Complication, Epidemiology]
113	synoviti\$.ab,ti.
114	ARTHRITIS/co, ep [Complication, Epidemiology]
115	arthriti\$.ab,ti.
116	BONE DENSITY/
117	(Bone? adj2 (densit\$ or content?)).ab,ti.
118	OSTEOPOROSIS/co, ep [Complication, Epidemiology]

#	Searches
119	or/97-118
120	STRESS INCONTINENCE/
121	(stress adj2 incontinen\$).ab,ti.
122	120 or 121
123	BARTTER SYNDROME/
124	pseudo bartter\$ syndrome.ab,ti.
125	pseudobartter\$ syndrome.ab,ti.
126	123 or 124 or 125
127	EXP KIDNEY DISEASE/co, ep [Complication, Epidemiology]
128	((kidney\$ or renal) adj2 (complicat\$ or disease\$ or insufficien\$ or fail\$ or dysfunction\$ or amyloidosis or stone\$ or impair\$)).ab,ti.
129	nephrolithiasis.ab,ti.
130	nephrocalcinosis.ab,ti.
131	nephritis.ab,ti.
132	or/127-131
133	LIVER DISEASE/co, ep [Complication, Epidemiology]
134	(liver adj2 disease?).ab,ti.
135	(liver adj2 dysfunction?).ab,ti.
136	LIVER CIRRHOSIS/co, ep [Complication, Epidemiology]
137	(liver adj2 cirrhos?s).ab,ti.
138	(liver adj2 fibros?s).ab,ti.
139	(hepatic adj2 cirrhos?s).ab,ti.
140	PORTAL HYPERTENSION/
141	(portal adj2 hypertension?).ab,ti.
142	cruveilhier baumgarten syndrome.ab,ti.
143	or/133-142
144	PANCREAS EXOCRINE INSUFFICIENCY/
145	(exocrine adj2 pancreatic adj2 insufficienc\$).ab,ti.
146	144 or 145
147	EXP INFERTILITY/co, ep [Complication, Epidemiology]
148	MALE INFERTILITY/
149	ASPERMIA/
150	ASTHENOSPERMIA/
151	AZOOSPERMIA/
152	OLIGOSPERMIA/
153	SERTOLI CELL ONLY SYNDROME/
154	FEMALE INFERTILITY/
155	sterility.ab,ti.
156	subfertility.ab,ti.
157	sub-fertility.ab,ti.
158	infertility.ab,ti.
159	Aspermia.ab,ti.
160	Asthenozoospermia.ab,ti.
161	Azoospermia.ab,ti.
162	Oligospermia.ab,ti.
163	sertoli cell only syndrome.ab,ti.

#	Searches
164	germinal cell aplasia.ab,ti.
165	del castillo syndrome.ab,ti.
166	or/147-163
167	4 and 38 and 44
168	4 and 38 and 50
169	4 and 38 and 56
170	4 and 38 and 61
171	4 and 38 and 75
172	4 and 38 and 83
173	4 and 38 and 102
174	4 and 38 and 125
175	4 and 38 and 132
176	4 and 38 and 138
177	4 and 38 and 150
178	4 and 38 and 153
179	4 and 38 and 172
180	or/167-179
181	letter.pt. or LETTER/
182	note.pt.
183	editorial.pt.
184	CASE REPORT/ or CASE STUDY/
185	(letter or comment*).ti.
186	or/181-185
187	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
188	186 not 187
189	ANIMAL/ not HUMAN/
190	NONHUMAN/
191	exp ANIMAL EXPERIMENT/
192	exp EXPERIMENTAL ANIMAL/
193	ANIMAL MODEL/
194	exp RODENT/
195	(rat or rats or mouse or mice).ti.
196	or/188-195
197	180 not 196

E.6 What is the effectiveness of programmes of exercise in the management of cystic fibrosis?

E.6.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 4 2016 on 5th January 2017.

#	Searches
1	META-ANALYSIS/
2	META-ANALYSIS AS TOPIC/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.

#	Searches
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
11	randomized controlled trial.pt.
12	controlled clinical trial.pt.
13	pragmatic clinical trial.pt.
14	randomi#ed.ab.
15	placebo.ab.
16	randomly.ab.
17	CLINICAL TRIALS AS TOPIC/
18	trial.ti.
19	or/11-18
20	or/10,19
21	CYSTIC FIBROSIS/
22	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
23	mucov\$.ti,ab.
24	or/21-23
25	exp EXERCISE/
26	exp EXERCISE THERAPY/
27	exp EXERCISE MOVEMENT TECHNIQUES/
28	exp SPORTS/
29	LIFE STYLE/
30	(exercis\$ or sport\$ or fit\$ or activ\$ or life style or lifestyle).ti,ab.
31	(walk\$ or run\$ or jog\$ or swim\$ or football or tennis or basketball or soccer or baseball).ti,ab.
32	(pilates or yoga or stretch\$ exercise\$ or breath\$ exercise?).ti,ab.
33	kinesi?therap\$.ti,ab.
34	((resistan\$ or interval or strength\$ or weight or physical or aerobic or anaerobic or endurance or muscle or isokinetic or dynamic or biometric or cardio\$) adj train\$).ti,ab.
35	(musculoskeletal and (physiotherap\$ or physical therap\$)).ti,ab.
36	or/25-35
37	24 and 36
38	limit 37 to english language
39	LETTER/
40	EDITORIAL/
41	NEWS/
42	exp HISTORICAL ARTICLE/
43	ANECDOTES AS TOPIC/
44	COMMENT/
45	CASE REPORT/
46	(letter or comment*).ti.

#	Searches
47	or/39-46
48	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
49	47 not 48
50	ANIMALS/ not HUMANS/
51	exp ANIMALS, LABORATORY/
52	exp ANIMAL EXPERIMENTATION/
53	exp MODELS, ANIMAL/
54	exp RODENTIA/
55	(rat or rats or mouse or mice).ti.
56	or/49-55
57	38 not 56
58	20 and 57

E.6.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	1 or 2
4	(exercis\$ or sport\$ or fit\$ or activ\$ or life style or lifestyle).ti,ab.
5	(walk\$ or run\$ or jog\$ or swim\$ or football or tennis or basketball or soccer or baseball).ti,ab.
6	(pilates or yoga or stretch\$ exercise\$ or breath\$ exercise?).ti,ab.
7	kinesi?therap\$.ti,ab.
8	((resistan\$ or interval or strength\$ or weight or physical or aerobic or anaerobic or endurance or muscle or isokinetic or dynamic or biometric or cardio\$) adj train\$).ti,ab.
9	(musculoskeletal and (physiotherap\$ or physical therap\$)).ti,ab.
10	or/4-9
11	3 and 10

E.6.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** November 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp EXERCISE/
6	exp EXERCISE THERAPY/
7	exp EXERCISE MOVEMENT TECHNIQUES/
8	exp SPORTS/
9	LIFE STYLE/
10	(exercis\$ or sport\$ or fit\$ or activ\$ or life style or lifestyle).ti,ab,kw.
11	(walk\$ or run\$ or jog\$ or swim\$ or football or tennis or basketball or soccer or baseball).ti,ab,kw.

#	Searches
12	(pilates or yoga or stretch\$ exercise\$ or breath\$ exercise?).ti,ab,kw.
13	kinesi?therap\$.ti,ab,kw.
14	((resistan\$ or interval or strength\$ or weight or physical or aerobic or anaerobic or endurance or muscle or isokinetic or dynamic or biometric or cardio\$) adj train\$).ti,ab.
15	(musculoskeletal and (physiotherap\$ or physical therap\$)).ti,ab.
16	or/5-15
17	4 and 16
18	limit 17 to english language

E.6.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to January 05, 2017, **EBM Reviews - Database of Abstracts of Reviews of Effects 1st Quarter 2015** on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	EXERCISE.kw.
6	EXERCISE THERAPY.kw.
7	EXERCISE MOVEMENT TECHNIQUES.kw.
8	SPORTS.kw.
9	LIFE STYLE.kw.
10	(exercis\$ or sport\$ or fit\$ or activ\$ or life style or lifestyle).ti,ab,kw.
11	(walk\$ or run\$ or jog\$ or swim\$ or football or tennis or basketball or soccer or baseball).ti,ab,kw.
12	(pilates or yoga or stretch\$ exercise\$ or breath\$ exercise?).ti,ab,kw.
13	kinesi?therap\$.ti,ab,kw.
14	((resistan\$ or interval or strength\$ or weight or physical or aerobic or anaerobic or endurance or muscle or isokinetic or dynamic or biometric or cardio\$) adj train\$).ti,ab.
15	(musculoskeletal and (physiotherap\$ or physical therap\$)).ti,ab.
16	or/5-15
17	4 and 16

E.6.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment** 4th Quarter 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).mp.
3	mucov\$.mp.
4	or/1-3
5	exp EXERCISE/
6	exp EXERCISE THERAPY/
7	exp EXERCISE MOVEMENT TECHNIQUES/

#	Searches
8	exp SPORTS/
9	LIFE STYLE/
10	(exercis\$ or sport\$ or fit\$ or activ\$ or life style or lifestyle).ti,tw.
11	(walk\$ or run\$ or jog\$ or swim\$ or football or tennis or basketball or soccer or baseball).ti,tw.
12	(pilates or yoga or stretch\$ exercise\$ or breath\$ exercise?).ti,tw.
13	kinesi?therap\$.ti,tw.
14	((resistan\$ or interval or strength\$ or weight or physical or aerobic or anaerobic or endurance or muscle or isokinetic or dynamic or biometric or cardio\$) adj train\$).ti,tw.
15	(musculoskeletal and (physiotherap\$ or physical therap\$)).ti,tw.
16	or/5-15
17	4 and 16

E.6.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	SYSTEMATIC REVIEW/
2	META-ANALYSIS/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic or evidence) adj2 (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
12	random*.ti,ab.
13	factorial*.ti,ab.
14	(crossover* or cross over*).ti,ab.
15	((doubl* or singl*) adj blind*).ti,ab.
16	(assign* or allocat* or volunteer* or placebo*).ti,ab.
17	CROSSOVER PROCEDURE/
18	SINGLE BLIND PROCEDURE/
19	RANDOMIZED CONTROLLED TRIAL/
20	DOUBLE BLIND PROCEDURE/
21	or/12-20
22	or/11,21
23	CYSTIC FIBROSIS/
24	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
25	mucov\$.ti,ab.
26	or/23-25
27	EXERCISE/

#	Searches
28	KINESIOTHERAPY/
29	exercise therap\$.ti,ab.
30	exercise movement technique?.ti,ab.
31	SPORT/
32	LIFESTYLE/
33	(exercis\$ or sport\$ or fit\$ or activ\$ or life style or lifestyle).ti. or (exercis\$ or sport\$ or fit\$ or activ\$ or life style or lifestyle).ab. /freq=2
34	(walk\$ or run\$ or jog\$ or swim\$ or football or tennis or basketball or soccer or baseball).ti,ab.
35	(pilates or yoga or stretch\$ exercise\$ or breath\$ exercise?).ti,ab.
36	((resistan\$ or interval or strength\$ or weight or physical or aerobic or anaerobic or endurance or muscle or isokinetic or dynamic or biometric or cardio\$) adj train\$).ti,ab.
37	(musculoskeletal and (physiotherap\$ or physical therap\$)).ti,ab.
38	or/27-37
39	26 and 38
40	limit 39 to english language
41	letter.pt. or LETTER/
42	note.pt.
43	editorial.pt.
44	CASE REPORT/ or CASE STUDY/
45	(letter or comment*).ti.
46	or/41-45
47	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
48	46 not 47
49	ANIMAL/ not HUMAN/
50	NONHUMAN/
51	exp ANIMAL EXPERIMENT/
52	exp EXPERIMENTAL ANIMAL/
53	ANIMAL MODEL/
54	exp RODENT/
55	(rat or rats or mouse or mice).ti.
56	or/48-55
57	40 not 56
58	22 and 57

E.7 What is the clinical and cost effectiveness of nutritional interventions in people with cystic fibrosis?

E.7.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	META-ANALYSIS/
2	META-ANALYSIS AS TOPIC/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.

#	Searches
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 psychlit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
9	cochrane.jw.
10	or/1-9
11	randomized controlled trial.pt.
12	controlled clinical trial.pt.
13	pragmatic clinical trial.pt.
14	randomi#ed.ab.
15	placebo.ab.
16	randomly.ab.
17	CLINICAL TRIALS AS TOPIC/
18	trial.ti.
19	or/11-18
20	or/10,19
21	OBSERVATIONAL STUDY/
22	(observat\$ adj3 (study or studies)).ti,ab.
23	COHORT STUDIES/
24	(cohort adj3 (study or studies)).ti,ab.
25	(cohort adj3 analy\$).ti,ab.
26	FOLLOW-UP STUDIES/
27	(Follow\$ up adj3 (study or studies)).ti,ab.
28	LONGITUDINAL STUDIES/
29	longitudinal\$.ti,ab.
30	RETROSPECTIVE STUDIES/
31	retrospective\$.ti,ab.
32	CROSS-SECTIONAL STUDIES/
33	cross-sectional\$.ti,ab.
34	CASE-CONTROL STUDIES/
35	case control.ti,ab.
36	or/21-35
37	CYSTIC FIBROSIS/
38	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
39	mucov\$.ti,ab.
40	37 or 38 or 39
41	exp NUTRITION DISORDERS/
42	exp "FEEDING AND EATING DISORDERS OF CHILDHOOD"/
43	exp "FEEDING AND EATING DISORDERS"/
44	exp NUTRITIONAL STATUS/
45	BODY DYSMORPHIC DISORDERS/
46	exp CHILD NUTRITIONAL PHYSIOLOGICAL PHENOMENA/
47	exp FAILURE TO THRIVE/
48	exp GROWTH DISORDERS/

#	Searches
49	GASTROESOPHAGEAL REFLUX/
50	exp ABDOMINAL PAIN/
51	(malnutrition\$ or malnourish\$ or undernutrition\$ or under nutrition\$ or undernourish\$ or under nourish\$ or overnutrition\$ or over nutrition\$ or overnourish\$ or over nourish\$ or malabsorb\$ or mal?absorb\$).ti,ab.
52	avitaminosis.ti,ab.
53	(underweight? or under weight? or overweight? or over weight? or obes\$).ti,ab.
54	((nutrition\$ or nourish\$ or grow\$ or vitamin? or weight or diet\$ or eat\$) adj3 (disorder? or deficien\$ or poor or status)).ti,ab.
55	(appetite or anorexia or (gord or gerd or acid reflux gastro??esopag\$ reflux or esopag\$ reflux or oesophag\$ reflux) or ((abdomin\$ or stomach or digest\$ or intestin\$ or colon or colic\$) adj3 (pain or discomf\$))).ti,ab.
56	((body dysmorph\$ or body image) adj2 disorder?) or dysmorphophobi?).ti,ab.
57	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti,ab.
58	or/41-57
59	PSYCHOTHERAPY/
60	exp BEHAVIOR THERAPY/
61	COGNITIVE THERAPY/
62	COUNSELING/ or DIRECTIVE COUNSELING/
63	FAMILY THERAPY/
64	ADAPTATION, PSYCHOLOGICAL/
65	(behavi?r\$ or counsel\$ or coach\$ or psychotherap\$ or psycho therap\$ or advis\$ or advi?e\$ or psycholog\$).ti,ab.
66	((behavi\$ or cognit\$) adj3 (technique? or therap\$ or psychotherap\$)).ti,ab.
67	CBT.ti,ab.
68	(mindfulness or relax\$ or meditat\$ or cope? or coping).ti,ab.
69	(psychoeducation\$ or psycho education\$).ti,ab.
70	or/59-69
71	exp NUTRITION THERAPY/
72	exp DIET THERAPY/
73	DIETETICS/
74	((diet\$ or nutrition\$ or eat\$ or feed\$) adj (therap\$ or program\$ or advi?e\$ or advis\$ or support\$ or modif\$ or chang\$)).ti,ab.
75	SNACKS/
76	(snack\$ or fastfood or fast food).ti,ab.
77	exp DIET, HIGH-FAT/
78	DIETARY FATS/
79	ENERGY INTAKE/
80	DIETARY PROTEINS/
81	DIETARY CARBOHYDRATES/
82	VITAMINS/
83	((fat\$ or lipid\$ or energ\$ or calori\$ or oral or nutrition\$ or protein? or carbohydrate? or vitamin\$) adj3 (intake or diet\$ or food\$ or meal?)).ti,ab.
84	or/71-83
85	DIETARY SUPPLEMENTS/
86	FOOD, FORTIFIED/
87	FOOD, FORMULATED/

#	Searches
88	((oral or nutrition\$ or calori\$ or diet\$ or energy or protein) adj2 supplement\$).ti,ab.
89	(supplement\$ adj2 feed\$).ti,ab.
90	prescri\$ feed\$.ti,ab.
91	((food or fed) adj2 (fortifi\$ or formulat\$)).ti,ab.
92	energy drink\$.ti,ab.
93	((oral or nutrition\$ or calori\$) adj3 (enhanc\$ or increas\$)).ti,ab.
94	elemental diet.ti,ab.
95	or/85-94
96	exp ENTERAL NUTRITION/
97	((enteral\$ or enteric\$ or intragastric\$ or intra gastric\$ or nasogastric\$ or naso gastric\$ or intrainestinal\$ or intra intestinal\$ or tube) adj3 (feed\$ or fed)).ti,ab.
98	GASTROSTOMY/
99	JEJUNOSTOMY/
100	INTUBATION, GASTROINTESTINAL/
101	(gastrostom\$ or jejunostom\$ or gastrojejunostom\$ or gastro jejunostom\$).ti,ab.
102	or/96-101
103	FEEDING BEHAVIOR/
104	FOOD HABITS/
105	((eat\$ or feed\$ or food or diet\$) adj (pattern\$ or behavio?r\$ or habit?)).ti,ab.
106	(meal\$ adj3 (manag\$ or timing or regular)).ti,ab.
107	or/103-106
108	exp APPETITE STIMULANTS/
109	CYPROHEPTADINE/
110	MEGESTROL ACETATE/
111	appetite stimulan\$.ti,ab.
112	(cyproheptadine or megace or maygace or megestrol).ti,ab,mp.
113	or/108-112
114	84 or 95 or 102 or 107 or 113
115	40 and 114
116	40 and 58 and 70
117	115 or 116
118	CYSTIC FIBROSIS/dh [DIET THERAPY]
119	117 or 118
120	limit 119 to english language
121	limit 120 to yr="1997 -Current"
122	LETTER/
123	EDITORIAL/
124	NEWS/
125	exp HISTORICAL ARTICLE/
126	ANECDOTES AS TOPIC/
127	COMMENT/
128	CASE REPORT/
129	(letter or comment*).ti.
130	or/122-129
131	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
132	130 not 131

#	Searches
133	ANIMALS/ not HUMANS/
134	exp ANIMALS, LABORATORY/
135	exp ANIMAL EXPERIMENTATION/
136	exp MODELS, ANIMAL/
137	exp RODENTIA/
138	(rat or rats or mouse or mice).ti.
139	or/132-138
140	121 not 139
141	20 and 140
142	36 and 140
143	141 or 142

E.7.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	(meta analy* or metanaly* or metaanaly*).ti,ab.
2	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
3	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
4	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
5	(search* adj4 literature).ab.
6	(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.
7	cochrane.jw.
8	randomi#ed.ab.
9	placebo.ab.
10	randomly.ab.
11	trial.ti.
12	or/1-11
13	(observat\$ adj3 (study or studies)).ti,ab.
14	(cohort adj3 (study or studies)).ti,ab.
15	(cohort adj3 analy\$).ti,ab.
16	(Follow\$ up adj3 (study or studies)).ti,ab.
17	longitudinal\$.ti,ab.
18	retrospective\$.ti,ab.
19	cross-sectional\$.ti,ab.
20	case control.ti,ab.
21	or/13-20
22	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
23	mucov\$.ti,ab.
24	or/22-23
25	(malnutrition\$ or malnourish\$ or undernutrition\$ or under nutrition\$ or undernourish\$ or under nourish\$ or overnutrition\$ or over nutrition\$ or overnourish\$ or over nourish\$ or malabsorb\$ or mal?absorb\$).ti,ab.

#	Searches
26	avitaminosis.ti,ab.
27	(underweight? or under weight? or overweight? or over weight? or obes\$.ti,ab.
28	((nutrition\$ or nourish\$ or grow\$ or vitamin? or weight or diet\$ or eat\$) adj3 (disorder? or deficien\$ or poor or status)).ti,ab.
29	(appetite or anorexia or (gord or gerd or acid reflux gastro??esopag\$ reflux or esopag\$ reflux or oesophag\$ reflux) or ((abdomin\$ or stomach or digest\$ or intestin\$ or colon or colic\$) adj3 (pain or discomf\$))).ti,ab.
30	((body dysmorph\$ or body image) adj2 disorder?) or dysmorphophobi?).ti,ab.
31	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti,ab.
32	or/25-31
33	(behavi?r\$ or counsel\$ or coach\$ or psychotherap\$ or psycho therap\$ or advis\$ or advi?e\$ or psycholog\$).ti,ab.
34	((behavi\$ or cognit\$) adj3 (technique? or therap\$ or psychotherap\$)).ti,ab.
35	CBT.ti,ab.
36	(mindfulness or relax\$ or meditat\$ or cope? or coping).ti,ab.
37	(psychoeducation\$ or psycho education\$).ti,ab.
38	or/33-37
39	((diet\$ or nutrition\$ or eat\$ or feed\$) adj (therap\$ or program\$ or advi?e\$ or advis\$ or support\$ or modif\$ or chang\$)).ti,ab.
40	(snack\$ or fastfood or fast food).ti,ab.
41	((fat\$ or lipid\$ or energ\$ or calori\$ or oral or nutrition\$ or protein? or carbohydrate? or vitamin\$) adj3 (intake or diet\$ or food\$ or meal?)).ti,ab.
42	((oral or nutrition\$ or calori\$ or diet\$ or energy or protein) adj2 supplement\$).ti,ab.
43	(supplement\$ adj2 feed\$).ti,ab.
44	prescri\$ feed\$.ti,ab.
45	((food or fed) adj2 (fortifi\$ or formulat\$)).ti,ab.
46	energy drink\$.ti,ab.
47	((oral or nutrition\$ or calori\$) adj3 (enhanc\$ or increas\$)).ti,ab.
48	elemental diet.ti,ab.
49	((enteral\$ or enteric\$ or intragastric\$ or intra gastric\$ or nasogastric\$ or naso gastric\$ or intrainestinal\$ or intra intestinal\$ or tube) adj3 (feed\$ or fed)).ti,ab.
50	(gastrostom\$ or jejunostom\$ or gastrojejunostom\$ or gastro jejunostom\$).ti,ab.
51	((eat\$ or feed\$ or food or diet\$) adj (pattern\$ or behavio?r\$ or habit?)).ti,ab.
52	(meal\$ adj3 (manag\$ or timing or regular)).ti,ab.
53	appetite stimulan\$.ti,ab.
54	(cyproheptadine or megace or maygace or megestrol).ti,ab,mp.
55	or/39-54
56	24 and 32 and 38
57	24 and 55
58	56 or 57
59	12 or 21
60	58 and 59
61	limit 60 to yr="1997 -Current"

E.7.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials**
 November 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab,kw.
4	1 or 2 or 3
5	exp NUTRITION DISORDERS/ or NUTRITION DISORDERS.kw.
6	exp "FEEDING AND EATING DISORDERS OF CHILDHOOD"/
7	exp "FEEDING AND EATING DISORDERS"/
8	(FEEDING DISORDER or MALNUTRITION or PROTEIN CALORIE MALNUTRITION or NUTRITIONAL DEFICIENCY or OVERNUTRITION).kw.
9	(EATING DISORDER or ANOREXIA NERVOSA or FOOD AVERSION or NUTRITIONAL STATUS).kw.
10	exp NUTRITIONAL STATUS/
11	BODY DYSMORPHIC DISORDERS.sh,kw.
12	exp CHILD NUTRITIONAL PHYSIOLOGICAL PHENOMENA/
13	(CHILD NUTRITION or FAILURE TO THRIVE or GROWTH DISORDER or GASTROESOPHAGEAL REFLUX or ABDOMINAL PAIN).kw.
14	exp FAILURE TO THRIVE/
15	exp GROWTH DISORDERS/
16	GASTROESOPHAGEAL REFLUX/
17	exp ABDOMINAL PAIN/
18	(malnutrition\$ or malnourish\$ or undernutrition\$ or under nutrition\$ or undernourish\$ or under nourish\$ or overnutrition\$ or over nutrition\$ or overnourish\$ or over nourish\$ or malabsorb\$ or mal?absorb\$).ti,ab.
19	avitaminosis.ti,ab.
20	(underweight? or under weight? or overweight? or over weight? or obes\$).ti,ab.
21	((nutrition\$ or nourish\$ or grow\$ or vitamin? or weight or diet\$ or eat\$) adj3 (disorder? or deficien\$ or poor or status)).ti,ab.
22	(appetite or anorexia or (gord or gerd or acid reflux gastro??esopag\$ reflux or esopag\$ reflux or oesophag\$ reflux) or ((abdomin\$ or stomach or digest\$ or intestin\$ or colon or colic\$) adj3 (pain or discomf\$))).ti,ab.
23	((((body dysmorph\$ or body image) adj2 disorder?) or dysmorphophobi?).ti,ab.
24	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti,ab.
25	or/5-24
26	PSYCHOTHERAPY.sh,kw.
27	exp BEHAVIOR THERAPY/ or BEHAVIOR THERAPY.kw.
28	COGNITIVE THERAPY.sh,kw.
29	COUNSELING/ or DIRECTIVE COUNSELING/
30	FAMILY THERAPY.sh,kw.
31	ADAPTATION, PSYCHOLOGICAL/
32	(COUNSELING or ADAPTIVE BEHAVIOR or DIRECTIVE COUNSELING).kw.
33	(behavi?r\$ or counsel\$ or coach\$ or psychotherap\$ or psycho therap\$ or advis\$ or advi?e\$ or psycholog\$).ti,ab.
34	((behavi\$ or cognit\$) adj3 (technique? or therap\$ or psychotherap\$)).ti,ab.
35	CBT.ti,ab.
36	(mindfulness or relax\$ or meditat\$ or cope? or coping).ti,ab.
37	(psychoeducation\$ or psycho education\$).ti,ab.
38	or/26-37
39	exp NUTRITION THERAPY/

#	Searches
40	exp DIET THERAPY/
41	DIETETICS/
42	(DIET THERAPY or NUTRITIONAL COUNSELING or DIETETICS).kw.
43	((diet\$ or nutrition\$ or eat\$ or feed\$) adj (therap\$ or program\$ or advi?e\$ or advis\$ or support\$ or modif\$ or chang\$)).ti,ab.
44	SNACKS/ or FAST FOOD.kw.
45	(snack\$ or fastfood or fast food).ti,ab.
46	exp DIET, HIGH-FAT/
47	DIETARY FATS/
48	ENERGY INTAKE/
49	DIETARY PROTEINS/
50	DIETARY CARBOHYDRATES/
51	VITAMINS/
52	(LIPID DIET or FAT INTAKE or CALORIC INTAKE or CARBOHYDRATE DIET or PROTEIN INTAKE).kw.
53	((fat\$ or lipid\$ or energ\$ or calori\$ or oral or nutrition\$ or protein? or carbohydrate? or vitamin\$) adj3 (intake or diet\$ or food\$ or meal?)).ti,ab.
54	or/39-53
55	DIETARY SUPPLEMENTS/ or DIET SUPPLEMENTATION.kw.
56	FOOD, FORTIFIED/ or ELEMENTAL DIET.kw.
57	FOOD, FORMULATED/
58	((oral or nutrition\$ or calori\$ or diet\$ or energy or protein) adj2 supplement\$).ti,ab.
59	(supplement\$ adj2 feed\$).ti,ab.
60	prescri\$ feed\$.ti,ab.
61	((food or fed) adj2 (fortif\$ or formulat\$)).ti,ab.
62	energy drink\$.ti,ab.
63	((oral or nutrition\$ or calori\$) adj3 (enhanc\$ or increas\$)).ti,ab.
64	elemental diet.ti,ab.
65	or/55-64
66	exp ENTERAL NUTRITION/ or ENTERIC FEEDING.kw.
67	((enteral\$ or enteric\$ or intragastric\$ or intra gastric\$ or nasogastric\$ or naso gastric\$ or intrainestinal\$ or intra intestinal\$ or tube) adj3 (feed\$ or fed)).ti,ab.
68	GASTROSTOMY.sh,kw.
69	JEJUNOSTOMY.sh,kw.
70	INTUBATION, GASTROINTESTINAL/
71	DIGESTIVE TRACT INTUBATION.kw.
72	(gastrostom\$ or jejunostom\$ or gastrojejunostom\$ or gastro jejunostom\$).ti,ab.
73	or/66-72
74	FEEDING BEHAVIOR.sh,kw.
75	FOOD HABITS/
76	((eat\$ or feed\$ or food or diet\$) adj (pattern\$ or behavio?r\$ or habit?)).ti,ab.
77	(meal\$ adj3 (manag\$ or timing or regular)).ti,ab.
78	or/74-77
79	exp APPETITE STIMULANTS/
80	APPETITE STIMULANT.kw.
81	CYPROHEPTADINE.sh,kw.

#	Searches
82	MEGESTROL ACETATE.sh,kw.
83	appetite stimulan\$.ti,ab.
84	(cyproheptadine or megace or maygace or megestrol).ti,ab,mp.
85	or/79-84
86	54 or 65 or 73 or 78 or 85
87	4 and 86
88	4 and 25 and 38
89	87 or 88
90	CYSTIC FIBROSIS/dh [DIET THERAPY]
91	89 or 90
92	limit 91 to yr="1997 -Current"

E.7.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to January 05, 2017, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab,kw.
4	1 or 2 or 3
5	NUTRITION DISORDERS.kw.
6	"FEEDING AND EATING DISORDERS OF CHILDHOOD".kw.
7	"FEEDING AND EATING DISORDERS".kw.
8	(FEEDING DISORDER or MALNUTRITION or PROTEIN CALORIE MALNUTRITION or NUTRITIONAL DEFICIENCY or OVERNUTRITION).kw.
9	(EATING DISORDER or ANOREXIA NERVOSA or FOOD AVERSION).kw.
10	NUTRITIONAL STATUS.kw.
11	BODY DYSMORPHIC DISORDERS.kw.
12	CHILD NUTRITIONAL PHYSIOLOGICAL PHENOMENA.kw.
13	CHILD NUTRITION.kw.
14	FAILURE TO THRIVE.kw.
15	GROWTH DISORDERS.kw.
16	GASTROESOPHAGEAL REFLUX.kw.
17	ABDOMINAL PAIN.kw.
18	(malnutrition\$ or malnourish\$ or undernutrition\$ or under nutrition\$ or undernourish\$ or under nourish\$ or overnutrition\$ or over nutrition\$ or overnourish\$ or over nourish\$ or malabsorb\$ or mal?absorb\$).ti,ab.
19	avitaminosis.ti,ab.
20	(underweight? or under weight? or overweight? or over weight? or obes\$).ti,ab.
21	((nutrition\$ or nourish\$ or grow\$ or vitamin? or weight or diet\$ or eat\$) adj3 (disorder? or deficien\$ or poor or status)).ti,ab.
22	(appetite or anorexia or (gord or gerd or acid reflux gastro??esopag\$ reflux or esopag\$ reflux or oesophag\$ reflux) or ((abdomin\$ or stomach or digest\$ or intestin\$ or colon or colic\$) adj3 (pain or discomf\$))).ti,ab.
23	((((body dysmorph\$ or body image) adj2 disorder?) or dysmorphophobi?).ti,ab.

#	Searches
24	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti,ab.
25	or/5-24
26	PSYCHOTHERAPY.kw.
27	BEHAVIOR THERAPY.kw.
28	COGNITIVE THERAPY.kw.
29	(COUNSELING or DIRECTIVE COUNSELING).kw.
30	FAMILY THERAPY.kw.
31	ADAPTATION, PSYCHOLOGICAL.kw.
32	ADAPTIVE BEHAVIOR.kw.
33	(behavi?r\$ or counsel\$ or coach\$ or psychotherap\$ or psycho therap\$ or advis\$ or advi?e\$ or psycholog\$).ti,ab.
34	((behavi\$ or cognit\$) adj3 (technique? or therap\$ or psychotherap\$)).ti,ab.
35	CBT.ti,ab.
36	(mindfulness or relax\$ or meditat\$ or cope? or coping).ti,ab.
37	(psychoeducation\$ or psycho education\$).ti,ab.
38	or/26-37
39	NUTRITION THERAPY.kw.
40	DIET THERAPY.kw.
41	DIETETICS.kw.
42	NUTRITIONAL COUNSELING.kw.
43	((diet\$ or nutrition\$ or eat\$ or feed\$) adj (therap\$ or program\$ or advi?e\$ or advis\$ or support\$ or modif\$ or chang\$)).ti,ab.
44	SNACKS.kw.
45	(snack\$ or fastfood or fast food).ti,ab.
46	DIET, HIGH-FAT.kw.
47	DIETARY FATS.kw.
48	ENERGY INTAKE.kw.
49	DIETARY PROTEINS.kw.
50	DIETARY CARBOHYDRATES.kw.
51	VITAMINS.kw.
52	((fat\$ or lipid\$ or energ\$ or calor\$ or oral or nutrition\$ or protein? or carbohydrate? or vitamin\$) adj3 (intake or diet\$ or food\$ or meal?)).ti,ab.
53	or/39-52
54	DIETARY SUPPLEMENTS.kw.
55	FOOD, FORTIFIED.kw.
56	FOOD, FORMULATED.kw.
57	((oral or nutrition\$ or calor\$ or diet\$ or energy or protein) adj2 supplement\$).ti,ab.
58	(supplement\$ adj2 feed\$).ti,ab.
59	prescri\$ feed\$.ti,ab.
60	((food or fed) adj2 (fortifi\$ or formulat\$)).ti,ab.
61	energy drink\$.ti,ab.
62	((oral or nutrition\$ or calor\$) adj3 (enhanc\$ or increas\$)).ti,ab.
63	elemental diet.ti,ab.
64	or/54-63
65	ENTERAL NUTRITION.kw.
66	((enteral\$ or enteric\$ or intragastric\$ or intra gastric\$ or nasogastric\$ or naso gastric\$ or

#	Searches
	intraintestinal\$ or intra intestinal\$ or tube) adj3 (feed\$ or fed)).ti,ab.
67	GASTROSTOMY.kw.
68	JEJUNOSTOMY.kw.
69	INTUBATION, GASTROINTESTINAL.kw.
70	DIGESTIVE TRACT INTUBATION.kw.
71	(gastrostom\$ or jejunostom\$ or gastrojejunostom\$ or gastro jejunostom\$).ti,ab.
72	or/65-71
73	FEEDING BEHAVIOR,kw.
74	FOOD HABITS.kw.
75	((eat\$ or feed\$ or food or diet\$) adj (pattern\$ or behavio?r\$ or habit?)).ti,ab.
76	(meal\$ adj3 (manag\$ or timing or regular)).ti,ab.
77	or/73-76
78	APPETITE STIMULANT?.kw.
79	(cyproheptadine or megace or maygace or megestrol).ti,ab,mp.
80	CYPROHEPTADINE.kw.
81	MEGESTROL ACETATE.kw.
82	appetite stimulan\$.ti,ab.
83	or/78-82
84	53 or 64 or 72 or 77 or 83
85	4 and 84
86	4 and 25 and 38
87	85 or 86

E.7.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 10th January 2017

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).mp.
3	mucov\$.mp.
4	1 or 2 or 3
5	exp NUTRITION DISORDERS/
6	exp "FEEDING AND EATING DISORDERS OF CHILDHOOD"/
7	exp "FEEDING AND EATING DISORDERS"/
8	exp NUTRITIONAL STATUS/
9	BODY DYSMORPHIC DISORDERS/
10	exp CHILD NUTRITIONAL PHYSIOLOGICAL PHENOMENA/
11	exp FAILURE TO THRIVE/
12	exp GROWTH DISORDERS/
13	GASTROESOPHAGEAL REFLUX/
14	exp ABDOMINAL PAIN/
15	(malnutrition\$ or malnourish\$ or undernutrition\$ or under nutrition\$ or undernourish\$ or under nourish\$ or overnutrition\$ or over nutrition\$ or overnourish\$ or over nourish\$ or malabsorb\$ or mal?absorb\$).tw.
16	avitaminosis.tw.
17	(underweight? or under weight? or overweight? or over weight? or obes\$).tw.

#	Searches
18	((nutrition\$ or nourish\$ or grow\$ or vitamin? or weight or diet\$ or eat\$) adj3 (disorder? or deficient\$ or poor or status)).tw.
19	(appetite or anorexia or (gord or gerd or acid reflux gastro??esopag\$ reflux or esopag\$ reflux or oesophag\$ reflux) or ((abdomin\$ or stomach or digest\$ or intestin\$ or colon or colic\$) adj3 (pain or discomf\$))).tw.
20	(((body dysmorph\$ or body image) adj2 disorder?) or dysmorphophobi?).tw.
21	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).tw.
22	or/5-21
23	PSYCHOTHERAPY/
24	exp BEHAVIOR THERAPY/
25	COGNITIVE THERAPY/
26	COUNSELING/ or DIRECTIVE COUNSELING/
27	FAMILY THERAPY/
28	ADAPTATION, PSYCHOLOGICAL/
29	(behavi?r\$ or counsel\$ or coach\$ or psychotherap\$ or psycho therap\$ or advis\$ or advi?e\$ or psycholog\$).tw.
30	((behavi\$ or cognit\$) adj3 (technique? or therap\$ or psychotherap\$)).tw.
31	CBT.tw.
32	(mindfulness or relax\$ or meditat\$ or cope? or coping).tw.
33	(psychoeducation\$ or psycho education\$).tw.
34	or/23-33
35	exp NUTRITION THERAPY/
36	exp DIET THERAPY/
37	DIETETICS/
38	((diet\$ or nutrition\$ or eat\$ or feed\$) adj (therap\$ or program\$ or advi?e\$ or advis\$ or support\$ or modif\$ or chang\$)).tw.
39	SNACKS/
40	(snack\$ or fastfood or fast food).tw.
41	exp DIET, HIGH-FAT/
42	DIETARY FATS/
43	ENERGY INTAKE/
44	DIETARY PROTEINS/
45	DIETARY CARBOHYDRATES/
46	VITAMINS/
47	((fat\$ or lipid\$ or energ\$ or calori\$ or oral or nutrition\$ or protein? or carbohydrate? or vitamin\$) adj3 (intake or diet\$ or food\$ or meal?)).tw.
48	or/35-47
49	DIETARY SUPPLEMENTS/
50	FOOD, FORTIFIED/
51	FOOD, FORMULATED/
52	((oral or nutrition\$ or calori\$ or diet\$ or energy or protein) adj2 supplement\$).tw.
53	(supplement\$ adj2 feed\$).tw.
54	prescri\$ feed\$.tw.
55	((food or fed) adj2 (fortifi\$ or formulat\$)).tw.
56	energy drink\$.tw.
57	((oral or nutrition\$ or calori\$) adj3 (enhanc\$ or increas\$)).tw.
58	elemental diet.tw.

#	Searches
59	or/49-58
60	exp ENTERAL NUTRITION/
61	((enteral\$ or enteric\$ or intragastric\$ or intra gastric\$ or nasogastric\$ or naso gastric\$ or intrainestinal\$ or intra intestinal\$ or tube) adj3 (feed\$ or fed)).tw.
62	GASTROSTOMY/
63	JEJUNOSTOMY/
64	INTUBATION, GASTROINTESTINAL/
65	(gastrostom\$ or jejunostom\$ or gastrojejunostom\$ or gastro jejunostom\$).tw.
66	or/60-65
67	FEEDING BEHAVIOR/
68	FOOD HABITS/
69	((eat\$ or feed\$ or food or diet\$) adj (pattern\$ or behavio?r\$ or habit?)).tw.
70	(meal\$ adj3 (manag\$ or timing or regular)).tw.
71	or/67-70
72	exp APPETITE STIMULANTS/
73	CYPROHEPTADINE/
74	MEGESTROL ACETATE/
75	appetite stimulan\$.tw.
76	(cyproheptadine or megace or maygace or megestrol).mp.
77	or/72-76
78	48 or 59 or 66 or 71 or 77
79	4 and 78
80	4 and 22 and 34
81	79 or 80
82	CYSTIC FIBROSIS/dh [DIET THERAPY]
83	81 or 82

E.7.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	SYSTEMATIC REVIEW/
2	META-ANALYSIS/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic or evidence) adj2 (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
12	random*.ti,ab.
13	factorial*.ti,ab.

#	Searches
14	(crossover* or cross over*).ti,ab.
15	((doubl* or singl*) adj blind*).ti,ab.
16	(assign* or allocat* or volunteer* or placebo*).ti,ab.
17	CROSSOVER PROCEDURE/
18	SINGLE BLIND PROCEDURE/
19	RANDOMIZED CONTROLLED TRIAL/
20	DOUBLE BLIND PROCEDURE/
21	or/12-20
22	or/11,21
23	OBSERVATIONAL STUDY/
24	(observat\$ adj3 (study or studies)).ti,ab.
25	COHORT ANALYSIS/
26	(cohort adj3 (study or studies)).ti,ab.
27	(cohort adj3 analy\$).ti,ab.
28	FOLLOW UP/
29	(follow\$ up adj3 (study or studies)).ti,ab.
30	LONGITUDINAL STUDY/
31	longitudinal\$.ti,ab.
32	RETROSPECTIVE STUDIY/
33	retrospective\$.ti,ab.
34	CROSS-SECTIONAL STUDY/
35	cross-sectional\$.ti,ab.
36	CASE CONTROL STUDY/
37	case control.ti,ab.
38	or/23-37
39	CYSTIC FIBROSIS/
40	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
41	mucov\$.ti,ab.
42	39 or 40 or 41
43	NUTRITION DISORDER/
44	FEEDING DISORDER/
45	MALNUTRITION/
46	PROTEIN CALORIE MALNUTRITION/
47	NUTRITIONAL DEFICIENCY/
48	OVERNUTRITION/
49	EATING DISORDER/ or ANOREXIA NERVOSA/ or FOOD AVERSION/
50	NUTRITIONAL STATUS/
51	BODY DYSMORPHIC DISORDER/
52	CHILD NUTRITION/
53	FAILURE TO THRIVE/
54	GROWTH DISORDER/
55	GASTROESOPHAGEAL REFLUX/
56	ABDOMINAL PAIN/
57	(malnutrition\$ or malnourish\$ or undernutrition\$ or under nutrition\$ or undernourish\$ or under nourish\$ or overnutrition\$ or over nutrition\$ or overnourish\$ or over nourish\$ or malabsorb\$ or mal?absorb\$).ti,ab.

#	Searches
58	avitaminosis.ti,ab.
59	(underweight? or under weight? or overweight? or over weight? or obes\$.ti,ab.
60	((nutrition\$ or nourish\$ or grow\$ or vitamin? or weight or diet\$ or eat\$) adj3 (disorder? or deficien\$ or poor or status)).ti,ab.
61	(appetite or anorexia or (gord or gerd or acid reflux gastro??esopag\$ reflux or esopag\$ reflux or oesophag\$ reflux) or ((abdomin\$ or stomach or digest\$ or intestin\$ or colon or colic\$) adj3 (pain or discomf\$))).ti,ab.
62	((body dysmorph\$ or body image) adj2 disorder?) or dysmorphophobi?).ti,ab.
63	((fail\$ or falter\$) adj3 (thriv\$ or weight or grow\$)).ti,ab.
64	or/43-63
65	PSYCHOTHERAPY/
66	BEHAVIOR THERAPY/
67	COGNITIVE THERAPY/
68	COUNSELING/
69	FAMILY THERAPY/
70	ADAPTIVE BEHAVIOR/
71	DIRECTIVE COUNSELING/
72	(behavi?r\$ or counsel\$ or coach\$ or psychotherap\$ or advis\$ or advi?e\$ or psycholog\$).ti,ab.
73	((behavi\$ or cognit\$) adj3 (technique? or therap\$ or psychotherap\$)).ti,ab.
74	CBT.ti,ab.
75	(mindfulness or relax\$ or meditat\$ or cope? or coping).ti,ab.
76	(psychoeducation\$ or psycho education\$).ti,ab.
77	or/65-76
78	DIET THERAPY/
79	NUTRITIONAL COUNSELING/
80	DIETETICS/
81	((diet\$ or nutrition\$ or eat\$ or feed\$) adj (therap\$ or program\$ or advi?e\$ or advis\$ or support\$ or modif\$ or chang\$)).ti,ab.
82	FAST FOOD/
83	(snack\$ or fastfood or fast food).ti,ab.
84	LIPID DIET/
85	FAT INTAKE/
86	CALORIC INTAKE/
87	CARBOHYDRATE DIET/
88	PROTEIN INTAKE/
89	((fat\$ or lipid\$ or energ\$ or calori\$ or oral or nutrition\$ or protein? or carbohydrate? or vitamin\$) adj3 (intake or diet\$ or food\$ or meal?)).ti,ab.
90	or/78-89
91	DIET SUPPLEMENTATION/
92	ELEMENTAL DIET/
93	((oral or nutrition\$ or calori\$ or diet\$ or energy or protein) adj2 supplement\$).ti,ab.
94	(supplement\$ adj2 feed\$).ti,ab.
95	prescri\$ feed\$.ti,ab.
96	((food or fed) adj2 (fortifi\$ or formulat\$)).ti,ab.
97	energy drink\$.ti,ab.
98	((oral or nutrition\$ or calori\$) adj3 (enhanc\$ or increas\$)).ti,ab.

#	Searches
99	or/91-98
100	ENTERIC FEEDING/
101	((enteral\$ or enteric\$ or intragastric\$ or intra gastric\$ or nasogastric\$ or naso gastric\$ or intrainestinal\$ or intra intestinal\$ or tube) adj3 (feed\$ or fed)).ti,ab.
102	GASTROSTOMY/
103	JEJUNOSTOMY/
104	DIGESTIVE TUBE/
105	DIGESTIVE TRACT INTUBATION/
106	(gastrostom\$ or jejunostom\$ or gastrojejunostom\$ or gastro jejunostom\$).ti,ab.
107	or/100-106
108	FEEDING BEHAVIOR/
109	((eat\$ or feed\$ or food or diet\$) adj (pattern\$ or behavio?r\$ or habit?)).ti,ab.
110	(meal\$ adj3 (manag\$ or timing or regular)).ti,ab.
111	or/108-110
112	APPETITE STIMULANT/
113	CYPROHEPTADINE/
114	MEGESTROL ACETATE/
115	appetite stimulan\$.ti,ab.
116	(cyproheptadine or megace or maygace or megestrol).ti,ab,mp.
117	or/112-116
118	90 or 99 or 107 or 111 or 117
119	42 and 118
120	42 and 64 and 77
121	119 or 120
122	limit 121 to english language
123	limit 122 to yr="1997 -Current"
124	letter.pt. or LETTER/
125	note.pt.
126	editorial.pt.
127	CASE REPORT/ or CASE STUDY/
128	(letter or comment*).ti.
129	or/124-128
130	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
131	129 not 130
132	ANIMAL/ not HUMAN/
133	NONHUMAN/
134	exp ANIMAL EXPERIMENT/
135	exp EXPERIMENTAL ANIMAL/
136	ANIMAL MODEL/
137	exp RODENT/
138	(rat or rats or mouse or mice).ti.
139	or/131-138
140	123 not 139
141	22 and 140
142	38 and 140
143	141 or 142

E.8 In people with cystic fibrosis, what is the effectiveness of enzyme replacement therapy in the treatment of exocrine pancreatic insufficiency?

E.8.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to October Week 3 2016 on 1st November 2016.

#	Searches
1	META-ANALYSIS/
2	META-ANALYSIS AS TOPIC/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic* or evidence*) adj2 (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
11	randomized controlled trial.pt.
12	controlled clinical trial.pt.
13	pragmatic clinical trial.pt.
14	randomi#ed.ab.
15	placebo.ab.
16	randomly.ab.
17	CLINICAL TRIALS AS TOPIC/
18	trial.ti.
19	or/11-18
20	or/10,19
21	CYSTIC FIBROSIS/
22	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
23	mucov\$.ti,ab.
24	or/21-23
25	exp PANCREATIC EXTRACTS/
26	exp LIPASE/
27	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).ti,ab.
28	PERT.ti,ab.
29	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or lipotamase or pan##trat).mp.
30	or/25-29
31	and/24,30
32	limit 31 to english language
33	LETTER/
34	EDITORIAL/
35	NEWS/

#	Searches
36	exp HISTORICAL ARTICLE/
37	ANECDOTES AS TOPIC/
38	COMMENT/
39	CASE REPORT/
40	(letter or comment* or abstracts).ti.
41	or/33-40
42	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
43	41 not 42
44	ANIMALS/ not HUMANS/
45	exp ANIMALS, LABORATORY/
46	exp ANIMAL EXPERIMENTATION/
47	exp MODELS, ANIMAL/
48	exp RODENTIA/
49	(rat or rats or mouse or mice).ti.
50	or/43-49
51	32 not 50
52	and/20,51

E.8.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** October 31, 2016 on 1st November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	or/1-2
4	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).ti,ab.
5	PERT.ti,ab.
6	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or lipotamase or pan##trat).mp.
7	or/4-6
8	and/3,7

E.8.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** September 2016 on 1st November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	Cochrane Cystic Fibrosis Group.gc.
4	mucov\$.ti,ab.
5	or/1-4
6	exp PANCREATIC EXTRACTS/
7	PANCREAS EXTRACT.kw.

#	Searches
8	exp LIPASE/
9	(pancrea\$ adj (enzyme? or extract?)).ti,ab.
10	PERT.ti,ab.
11	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or liprotamase or pan##trat).mp.
12	or/6-11
13	and/5,12

E.8.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to October 26, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 1st December 2015.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw,tx,kw.
2	mucov\$.tw,tx.
3	or/1-2
4	(PANCREATIC EXTRACTS or PANCREAS EXTRACT or PANCREAS ENZYME).kw.
5	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).tw,tx.
6	PERT.tw,tx.
7	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or liprotamase or pan##trat).mp.
8	or/4-7
9	and/3,8

E.8.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment** 3rd Quarter 2016 on 1st November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	exp PANCREATIC EXTRACTS/
6	exp LIPASE/
7	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).tw.
8	PERT.tw.
9	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or liprotamase or pan##trat).tw,hw.
10	or/5-9
11	and/4,10

E.8.6 Database: Embase

Last searched on **Embase** 1974 to 2016 Week 44 on 1st November 2016.

#	Searches
1	SYSTEMATIC REVIEW/
2	META-ANALYSIS/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic or evidence) adj2 (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
12	random*.ti,ab.
13	factorial*.ti,ab.
14	(crossover* or cross over*).ti,ab.
15	((doubl* or singl*) adj blind*).ti,ab.
16	(assign* or allocat* or volunteer* or placebo*).ti,ab.
17	CROSSOVER PROCEDURE/
18	SINGLE BLIND PROCEDURE/
19	RANDOMIZED CONTROLLED TRIAL/
20	DOUBLE BLIND PROCEDURE/
21	or/12-20
22	or/11,21
23	CYSTIC FIBROSIS/
24	mucov\$.ti,ab.
25	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
26	or/23-25
27	PANCREAS EXTRACT/ or PANCREAS ENZYME/
28	TRIACYLGLYCEROL LIPASE/
29	PANCREATIN/
30	PANZYTRAT/
31	PANCRELIPASE/
32	LIPROTAMASE/
33	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).ti,ab.
34	PERT.ti,ab.
35	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or liprotamase or pan##trat).mp.
36	or/27-35
37	and/26,36
38	limit 37 to english language
39	conference abstract.pt.
40	letter.pt. or LETTER/
41	note.pt.
42	editorial.pt.

#	Searches
43	CASE REPORT/ or CASE STUDY/
44	(letter or comment* or abstracts).ti.
45	or/39-44
46	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
47	45 not 46
48	ANIMAL/ not HUMAN/
49	NONHUMAN/
50	exp ANIMAL EXPERIMENT/
51	exp EXPERIMENTAL ANIMAL/
52	ANIMAL MODEL/
53	exp RODENT/
54	(rat or rats or mouse or mice).ti.
55	or/47-54
56	38 not 55
57	and/22,56

E.9 What are the effective strategies for prevention and treatment of distal ileal obstruction syndrome?

E.9.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp INTESTINAL OBSTRUCTION/
6	CONSTIPATION/
7	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (obstruct\$ or inertia or dysmotil\$ or aton\$ or paraly\$)).ti,ab.
8	(ileus or DIOS).ti,ab.
9	(constipat\$ or obstipat\$ or dyschezi\$).ti,ab.
10	or/5-9
11	LAXATIVES/
12	exp CATHARTICS/
13	exp POLYETHYLENE GLYCOLS/
14	LACTULOSE/
15	laxative?.ti,ab.
16	(stool? adj1 soft\$).ti,ab.
17	(cathartic? or purgative? or bowel evacuant? or bowel preparation solution?).ti,ab.
18	(polyethylene glycol? or macrogol? or movicol or laxido or molaxole or klean prep or golytely).mp.
19	(lactulose or duphalac or amivalex or normase or lactugal or laevolac).mp.
20	(senna or sen?kot or sennokot or manevac).mp.
21	(sodium picosul\$ or dulcosan or guttalax or laxober\$ or picolax).mp.

#	Searches
22	(bisacodyl or laxbene or durolax or dulcolax or bicol or laxagetten).mp.
23	FLUID THERAPY/
24	((oral or therap\$) adj3 (rehydrat\$ or hydrat\$ or fluid?)).ti,ab.
25	ENEMA/
26	enema\$.ti,ab.
27	PHOSPHATES/
28	sodium phosphate?.mp.
29	DIATRIZOATE MEGLUMINE/
30	(diatrizoate or meglumin? or gastrogra??in).mp.
31	ACETYLCYSTEINE/
32	(acetylcysteine or nacetylcysteine or acetyl cysteine or nacetyl cysteine).mp.
33	THERAPEUTIC IRRIGATION/
34	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (lavage or irrigat\$)).ti,ab.
35	DIGESTIVE SYSTEM SURGICAL PROCEDURES/
36	LAPAROTOMY/
37	ANASTOMOSIS, SURGICAL/
38	ANASTOMOSIS, ROUX-EN-Y/
39	exp ENTEROSTOMY/
40	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (surg\$ or resect\$ or anastomosis)).ti,ab.
41	(laparotom\$ or entero?tom\$ or ileo?tom\$).ti,ab.
42	exp PANCREATIC EXTRACTS/
43	exp LIPASE/
44	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).ti,ab.
45	PERT.ti,ab.
46	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or liprotamase or pan##trat).mp.
47	or/11-46
48	4 and 10 and 47
49	exp INTESTINAL OBSTRUCTION/dt, su, th [Drug Therapy, Surgery, Therapy]
50	4 and 49
51	48 or 50
52	limit 51 to english language
53	LETTER/
54	EDITORIAL/
55	NEWS/
56	exp HISTORICAL ARTICLE/
57	ANECDOTES AS TOPIC/
58	COMMENT/
59	CASE REPORT/
60	(letter or comment*).ti.
61	or/53-60
62	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
63	61 not 62

#	Searches
64	ANIMALS/ not HUMANS/
65	exp ANIMALS, LABORATORY/
66	exp ANIMAL EXPERIMENTATION/
67	exp MODELS, ANIMAL/
68	exp RODENTIA/
69	(rat or rats or mouse or mice).ti.
70	or/63-69
71	52 not 70

E.9.2 Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	or/1-2
4	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (obstruct\$ or inertia or dysmotil\$ or aton\$ or paraly\$)).ti,ab.
5	(ileus or DIOS).ti,ab.
6	(constipat\$ or obstipat\$ or dyschezi\$).ti,ab.
7	or/4-6
8	laxative?.ti,ab.
9	(stool? adj1 soft\$).ti,ab.
10	(cathartic? or purgative? or bowel evacuant? or bowel preparation solution?).ti,ab.
11	(polyethylene glycol? or macrogol? or movicol or laxido or molaxole or klean prep or golytely).mp.
12	(lactulose or duphalac or amivalex or normase or lactugal or laevolac).mp.
13	(senna or sen?kot or sennokot or manevac).mp.
14	(sodium picosul\$ or dulcosan or guttalax or laxober\$ or picolax).mp.
15	(bisacodyl or laxbene or durolax or dulcolax or bicol or laxagetten).mp.
16	((oral or therap\$) adj3 (rehydrat\$ or hydrat\$ or fluid?)).ti,ab.
17	enema\$.ti,ab.
18	phosphate?.mp.
19	(diatrizoate or meglumin? or gastrogra??in).mp.
20	(acetylcysteine or nacetylcysteine or acetyl cysteine or nacetyl cysteine).mp.
21	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (lavage or irrigat\$)).ti,ab.
22	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (surg\$ or resect\$ or anastomosis)).ti,ab.
23	(laparotom\$ or entero?tom\$ or ileo?tom\$).ti,ab.
24	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).ti,ab.
25	PERT.ti,ab.
26	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or liprotamase or pan##trat).mp.
27	or/8-26
28	3 and 7 and 27

E.9.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials**
 November 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab.
4	or/1-3
5	exp INTESTINAL OBSTRUCTION/
6	CONSTIPATION/
7	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (obstruct\$ or inertia or dysmotil\$ or aton\$ or paraly\$)).ti,ab,kw.
8	(ileus or DIOS).ti,ab.
9	(constipat\$ or obstipat\$ or dyschezi\$).ti,ab,kw.
10	or/5-9
11	LAXATIVES/
12	exp CATHARTICS/
13	exp POLYETHYLENE GLYCOLS/
14	LACTULOSE/
15	laxative?.ti,ab,kw.
16	(stool? adj1 soft\$).ti,ab.
17	(cathartic? or purgative? or bowel evacuant? or bowel preparation solution?).ti,ab,kw.
18	(polyethylene glycol? or macrogol? or movicol or laxido or molaxole or klean prep or golytely).mp,kw.
19	(lactulose or duphalac or amivalex or normase or lactugal or laevolac).mp,kw.
20	(senna or sen?kot or sennokot or manevac).mp.
21	(sodium picosul\$ or dulcosan or guttalex or laxober\$ or picolax).mp.
22	(bisacodyl or laxbene or durolax or dulcolax or bicol or laxagetten).mp.
23	FLUID THERAPY/
24	((oral or therap\$) adj3 (rehydrat\$ or hydrat\$ or fluid?)).ti,ab,kw.
25	ENEMA/
26	enema\$.ti,ab,kw.
27	PHOSPHATES/
28	phosphate?.mp.
29	DIATRIZOATE MEGLUMINE/
30	(diatrizoate or meglumin? or gastrogra??in).mp,kw.
31	ACETYLCYSTEINE/
32	(acetylcysteine or nacetylcysteine or acetyl cysteine or nacetyl cysteine).mp,kw.
33	THERAPEUTIC IRRIGATION/
34	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (lavage or irrigat\$)).ti,ab,kw.
35	DIGESTIVE SYSTEM SURGICAL PROCEDURES/
36	LAPAROTOMY/
37	ANASTOMOSIS, SURGICAL/
38	ANASTOMOSIS, ROUX-EN-Y/
39	exp ENTEROSTOMY/
40	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (surg\$ or resect\$ or

#	Searches
	anastomosis)).ti,ab,kw.
41	(laparotom\$ or entero?tom\$ or ileo?tom\$).ti,ab,kw.
42	exp PANCREATIC EXTRACTS/
43	exp LIPASE/
44	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).ti,ab,kw.
45	PERT.ti,ab.
46	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or liprotamase or pan##trat).mp,kw.
47	or/11-46
48	4 and 10 and 47
49	exp INTESTINAL OBSTRUCTION/dt, su, th [Drug Therapy, Surgery, Therapy]
50	4 and 49
51	48 or 50

E.9.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to January 05, 2017, **EBM Reviews - Database of Abstracts of Reviews of Effects 1st Quarter 2015** on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).mp.
3	mucov\$.mp.
4	or/1-3
5	INTESTINAL OBSTRUCTION.kw.
6	CONSTIPATION.kw.
7	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (obstruct\$ or inertia or dysmotil\$ or aton\$ or paraly\$)).mp.
8	(ileus or DIOS).mp.
9	(constipat\$ or obstipat\$ or dyschezi\$).mp.
10	or/5-9
11	LAXATIVES.kw.
12	CATHARTICS.kw.
13	POLYETHYLENE GLYCOLS.kw.
14	LACTULOSE.kw.
15	laxative?.mp.
16	(stool? adj1 soft\$.mp.
17	(cathartic? or purgative? or bowel evacuant? or bowel preparation solution?).mp.
18	(polyethylene glycol? or macrogol? or movicol or laxido or molaxole or klean prep or golytely).mp.
19	(lactulose or duphalac or amivalex or normase or lactugal or laevolac).mp.
20	(senna or sen?kot or sennokot or manevac).mp.
21	(sodium picosul\$ or dulcosan or guttalax or laxober\$ or picolax).mp.
22	(bisacodyl or laxbene or durolax or dulcolax or bicol or laxagetten).mp.
23	FLUID THERAPY.kw.

#	Searches
24	((oral or therap\$) adj3 (rehydrat\$ or hydrat\$ or fluid?)).mp.
25	ENEMA.kw.
26	enema\$.mp.
27	PHOSPHATES.kw.
28	phosphate?.mp.
29	DIATRIZOATE MEGLUMINE.kw.
30	(diatrizoate or meglumin? or gastrogra??in).mp.
31	ACETYLCYSTEINE.kw.
32	(acetylcysteine or nacytylcysteine or acetyl cysteine or nacetyl cysteine).mp.
33	THERAPEUTIC IRRIGATION.kw.
34	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (lavage or irrigat\$)).mp.
35	DIGESTIVE SYSTEM SURGICAL PROCEDURES.kw.
36	LAPAROTOMY.kw.
37	ANASTOMOSIS, SURGICAL.kw.
38	ANASTOMOSIS, ROUX-EN-Y.kw.
39	ENTEROSTOMY.kw.
40	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (surg\$ or resect\$ or anastomosis)).mp.
41	(laparotom\$ or entero?tom\$ or ileo?tom\$).mp.
42	PANCREATIC EXTRACTS.kw.
43	LIPASE.kw.
44	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).mp.
45	PERT.mp.
46	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or liprotamase or pan##trat).mp.
47	or/11-46
48	4 and 10 and 47

E.9.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	exp INTESTINAL OBSTRUCTION/
6	CONSTIPATION/
7	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (obstruct\$ or inertia or dysmotil\$ or aton\$ or paraly\$)).tw.
8	(ileus or DIOS).tw.
9	(constipat\$ or obstipat\$ or dyschezi\$).tw.
10	or/5-9
11	LAXATIVES/

#	Searches
12	exp CATHARTICS/
13	exp POLYETHYLENE GLYCOLS/
14	LACTULOSE/
15	laxative?.tw.
16	(stool? adj1 soft\$.tw.
17	(cathartic? or purgative? or bowel evacuant? or bowel preparation solution?).tw.
18	(polyethylene glycol? or macrogol? or movicol or laxido or molaxole or klean prep or golytely).mp.
19	(lactulose or duphalac or amivalex or normase or lactugal or laevolac).mp.
20	(senna or sen?kot or sennokot or manevac).mp.
21	(sodium picosul\$ or dulcosan or guttalex or laxober\$ or picolax).mp.
22	(bisacodyl or laxbene or durolax or dulcolax or bicol or laxagetten).mp.
23	FLUID THERAPY/
24	((oral or therap\$) adj3 (rehydrat\$ or hydrat\$ or fluid?)).tw.
25	ENEMA/
26	enema\$.tw.
27	PHOSPHATES/
28	phosphate?.mp.
29	DIATRIZOATE MEGLUMINE/
30	(diatrizoate or meglumin? or gastrogra??in).mp.
31	ACETYLCYSTEINE/
32	(acetylcysteine or nacetylcysteine or acetyl cysteine or nacetyl cysteine).mp.
33	THERAPEUTIC IRRIGATION/
34	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (lavage or irrigat\$)).tw.
35	DIGESTIVE SYSTEM SURGICAL PROCEDURES/
36	LAPAROTOMY/
37	ANASTOMOSIS, SURGICAL/
38	ANASTOMOSIS, ROUX-EN-Y/
39	exp ENTEROSTOMY/
40	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (surg\$ or resect\$ or anastomosis)).tw.
41	(laparotom\$ or entero?tom\$ or ileo?tom\$).tw.
42	exp PANCREATIC EXTRACTS/
43	exp LIPASE/
44	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).tw.
45	PERT.tw.
46	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or lipotamase or pan##trat).mp.
47	or/11-46
48	4 and 10 and 47
49	exp INTESTINAL OBSTRUCTION/dt, su, th [Drug Therapy, Surgery, Therapy]
50	4 and 49
51	48 or 50

E.9.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	mucov\$.ti,ab.
3	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
4	or/1-3
5	exp INTESTINE OBSTRUCTION/
6	GASTROINTESTINAL MOTILITY DISORDER/
7	CONSTIPATION/
8	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (obstruct\$ or inertia or dysmotil\$ or aton\$ or paraly\$)).ti,ab.
9	(ileus or DIOS).ti,ab.
10	(constipat\$ or obstipat\$ or dyschezi\$).ti,ab.
11	or/5-10
12	exp LAXATIVE/
13	MACROGOL/
14	LACTULOSE/
15	laxative?.ti,ab.
16	(stool? adj1 soft\$).ti,ab.
17	(cathartic? or purgative? or bowel evacuant? or bowel preparation solution?).ti,ab.
18	(polyethylene glycol? or macrogol? or movicol or laxido or molaxole or klean prep or golytely).mp.
19	(lactulose or duphalac or amivalex or normase or lactugal or laevolac).mp.
20	(senna or sen?kot or sennokot or manevac).mp.
21	(sodium picosul\$ or dulcosan or guttalax or laxober\$ or picolax).mp.
22	(bisacodyl or laxbene or durolax or dulcolax or bicol or laxagetten).mp.
23	FLUID THERAPY/
24	REHYDRATION/
25	ORAL REHYDRATION THERAPY/
26	((oral or therap\$) adj3 (rehydrat\$ or hydrat\$ or fluid?)).ti,ab.
27	ENEMA/
28	enema\$.ti,ab.
29	PHOSPHATE/
30	phosphate?.mp.
31	DIATRIZOATE/
32	MEGLUMINE DIATRIZOATE PLUS SODIUM DIATRIZOATE/
33	(diatrizoate or meglumin? or gastrogra??in).mp.
34	ACETYLCYSTEINE/
35	(acetylcysteine or nacetylcysteine or acetyl cysteine or nacetyl cysteine).mp.
36	LAVAGE/
37	exp INTESTINE LAVAGE/
38	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (lavage or irrigat\$)).ti,ab.
39	ABDOMINAL SURGERY/
40	GASTROINTESTINAL SURGERY/
41	LAPAROTOMY/

#	Searches
42	ANASTOMOSIS/
43	exp INTESTINE ANASTOMOSIS/
44	exp INTESTINE RESECTION/
45	exp ENTEROSTOMY/
46	((ileal or il#um or intestin\$ or gastrointestin\$ or bowel or colon\$) adj3 (surg\$ or resect\$ or anastomosis)).ti,ab.
47	(laparotom\$ or entero?tom\$ or ileo?tom\$).ti,ab.
48	PANCREAS EXTRACT/
49	PANCREAS ENZYME/
50	TRIACYLGLYCEROL LIPASE/
51	PANCREATIN/
52	PANZYTRAT/
53	PANCRELIPASE/
54	LIPROTAMASE/
55	(pancrea\$ adj (enzyme? or extract?) adj3 (therap\$ or treatment? or replacement\$ or supplement\$ or preparation? or formula\$ or product?)).ti,ab.
56	PERT.ti,ab.
57	(lipase or pancreatolipase or pancreatin or panteric or pancrelipase or pan#reon or creon or kreon or pan#rex or nutrizym or pan#rease or liprotamase or pan##trat).mp.
58	or/12-57
59	4 and 11 and 58
60	exp INTESTINE OBSTRUCTION/dt, su, th [Drug Therapy, Surgery, Therapy]
61	4 and 60
62	59 or 61
63	limit 62 to english language
64	letter.pt. or LETTER/
65	note.pt.
66	editorial.pt.
67	CASE REPORT/ or CASE STUDY/
68	(letter or comment*).ti.
69	or/64-68
70	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
71	69 not 70
72	ANIMAL/ not HUMAN/
73	NONHUMAN/
74	exp ANIMAL EXPERIMENT/
75	exp EXPERIMENTAL ANIMAL/
76	ANIMAL MODEL/
77	exp RODENT/
78	(rat or rats or mouse or mice).ti.
79	or/71-78
80	63 not 79

E.10 Liver disease

E.10.1 What is the diagnostic accuracy of tests to detect/ strategies to detect early and late CF liver disease?

E.10.2 What is the diagnostic and prognostic value of different strategies to detect CF liver disease and predict progression (including progression to cirrhosis and portal hypertension with (out) oesophageal varices)?

- Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp LIVER DISEASES/
6	(liver adj3 (disease? or dysfunction? or abnormal\$ or fail\$ or decompensation)).ab,ti.
7	(hypertension? adj3 portal).ab,ti.
8	((fibros?s or fibrocyst\$ or cirrhos?s) adj3 (liver or hepatic)).ab,ti.
9	hepatomegaly.ti,ab.
10	"ESOPHAGEAL AND GASTRIC VARICES"/
11	((oesophageal or esophageal) adj3 varice?).ti,ab.
12	or/5-11
13	exp PHYSICAL EXAMINATION/
14	(exam? or examin\$).ti,ab.
15	LIVER FUNCTION TESTS/
16	liver function test?.ti,ab.
17	LFT?.ti,ab.
18	(liver enzyme? adj5 (measur\$ or test\$)).ti,ab.
19	ALANINE TRANSAMINASE/
20	alanine transaminase?.ti,ab,nm.
21	alanine aminotransferase.ti,ab,nm.
22	ALT.ti,ab,nm.
23	ASPARTATE AMINOTRANSFERASES/
24	aspartate aminotransferase?.ti,ab,nm.
25	aspartate transaminase?.ti,ab,nm.
26	AST.ti,ab,nm.
27	ALKALINE PHOSPHATASE/
28	alkaline phosphatase?.ti,ab,nm.
29	ALP.ti,ab,nm.
30	GAMMA-GLUTAMYLTRANSFERASE/
31	Gam?a glutamyltransferase?.ti,ab,nm.
32	Gam?a glutamyl transferase?.ti,ab,nm.
33	GMT.ti,ab,nm.
34	gam?a glutamyltranspeptidase?.ti,ab,nm.
35	gam?a glutamyl transpeptidase?.ti,ab,nm.

#	Searches
36	GGT.ti,ab,nm.
37	GLUTATHIONE TRANSFERASE/
38	(glutathione adj2 transferase?).ti,ab,nm.
39	GST.ti,ab,nm.
40	BILIRUBIN/
41	bilirubin.ti,ab,nm.
42	INTERNATIONAL NORMALIZED RATIO/
43	international normali?ed ratio?.ti,ab,nm.
44	INR.ti,ab,nm.
45	ALBUMINS/
46	albumin?.ti,ab,nm.
47	BLOOD PLATELETS/
48	platelet?.ti,ab.
49	exp ULTRASONOGRAPHY/
50	(ultraso\$ or echo\$ or sono\$ or flowmet\$ or doppler\$).ti,ab.
51	uss.ab,ti.
52	ELASTICITY IMAGING TECHNIQUES/
53	elastogra\$.ab,ti.
54	Fibroscan.ab,ti.
55	or/13-54
56	4 and 12 and 55
57	exp LIVER DISEASES/di, us [Diagnosis, Ultrasonography]
58	4 and 57
59	56 or 58
60	limit 59 to english language
61	LETTER/
62	EDITORIAL/
63	NEWS/
64	exp HISTORICAL ARTICLE/
65	ANECDOTES AS TOPIC/
66	COMMENT/
67	CASE REPORT/
68	(letter or comment*).ti.
69	or/61-68
70	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
71	69 not 70
72	ANIMALS/ not HUMANS/
73	exp ANIMALS, LABORATORY/
74	exp ANIMAL EXPERIMENTATION/
75	exp MODELS, ANIMAL/
76	exp RODENTIA/
77	(rat or rats or mouse or mice).ti.
78	or/71-77
79	60 not 78

- Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	or/1-2
4	(liver adj3 (disease? or dysfunction? or abnormal\$ or fail\$ or decompensation)).ab,ti.
5	(hypertension? adj3 portal).ab,ti.
6	((fibros?s or fibrocyst\$ or cirrhos?s) adj3 (liver or hepatic)).ab,ti.
7	hepatomegaly.ti,ab.
8	((oesophageal or esophageal) adj3 varice?).ti,ab.
9	or/4-8
10	(exam? or examin\$).ti,ab.
11	liver function test?.ti,ab.
12	LFT?.ti,ab.
13	(liver enzyme? adj5 (measur\$ or test\$)).ti,ab.
14	alanine transaminase?.ti,ab,nm.
15	alanine aminotransferase.ti,ab,nm.
16	ALT.ti,ab,nm.
17	aspartate aminotransferase?.ti,ab,nm.
18	aspartate transaminase?.ti,ab,nm.
19	AST.ti,ab,nm.
20	alkaline phosphatase?.ti,ab,nm.
21	ALP.ti,ab,nm.
22	Gam?a glutamyltransferase?.ti,ab,nm.
23	Gam?a glutamyl transferase?.ti,ab,nm.
24	GMT.ti,ab,nm.
25	gam?a glutamyltranspeptidase?.ti,ab,nm.
26	gam?a glutamyl transpeptidase?.ti,ab,nm.
27	GGT.ti,ab,nm.
28	(glutathione adj2 transferase?).ti,ab,nm.
29	GST.ti,ab,nm.
30	bilirubin.ti,ab,nm.
31	international normali?ed ratio?.ti,ab,nm.
32	INR.ti,ab,nm.
33	albumin?.ti,ab,nm.
34	platelet?.ti,ab.
35	(ultraso\$ or echo\$ or sono\$ or flowmet\$ or doppler\$).ti,ab.
36	uss.ab,ti.
37	elastogra\$.ab,ti.
38	Fibroscan.ab,ti.
39	or/10-38

- Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** November 2016 on 5th January 2017.

#	Searches
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#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab,kw.
4	or/1-3
5	exp LIVER DISEASES/
6	(liver adj3 (disease? or dysfunction? or abnormal\$ or fail\$ or decompensation)).ab,ti,kw.
7	(hypertension? adj3 portal).ab,ti,kw.
8	((fibros?s or fibrocyst\$ or cirrhos?s) adj3 (liver or hepatic)).ab,ti,kw.
9	hepatomegaly.ti,ab,kw.
10	"ESOPHAGEAL AND GASTRIC VARICES"/
11	((oesophageal or esophageal) adj3 varice?).ti,ab,kw.
12	or/5-11
13	exp PHYSICAL EXAMINATION/
14	(exam? or examin\$).ti,ab,kw.
15	LIVER FUNCTION TESTS/
16	liver function test?.ti,ab,kw.
17	LFT?.ti,ab,kw.
18	(liver enzyme? adj5 (measur\$ or test\$)).ti,ab,kw.
19	ALANINE TRANSAMINASE/
20	alanine transaminase?.ti,ab,kw.
21	alanine aminotransferase.ti,ab,kw.
22	ALT.ti,ab,kw.
23	ASPARTATE AMINOTRANSFERASES/
24	aspartate aminotransferase?.ti,ab,kw.
25	aspartate transaminase?.ti,ab,kw.
26	AST.ti,ab,kw.
27	ALKALINE PHOSPHATASE/
28	alkaline phosphatase?.ti,ab,kw.
29	ALP.ti,ab,kw.
30	GAMMA-GLUTAMYLTRANSFERASE/
31	Gam?a glutamyltransferase?.ti,ab,kw.
32	Gam?a glutamyl transferase?.ti,ab,kw.
33	GMT.ti,ab,kw.
34	gam?a glutamyltranspeptidase?.ti,ab,kw.
35	gam?a glutamyl transpeptidase?.ti,ab,kw.
36	GGT.ti,ab,kw.
37	GLUTATHIONE TRANSFERASE/
38	(glutathione adj2 transferase?).ti,ab,kw.
39	GST.ti,ab,kw.
40	BILIRUBIN/
41	bilirubin.ti,ab,kw.
42	INTERNATIONAL NORMALIZED RATIO/
43	international normali?ed ratio?.ti,ab,kw.
44	INR.ti,ab,kw.
45	ALBUMINS/

#	Searches
46	albumin?.ti,ab,kw.
47	BLOOD PLATELETS/
48	platelet?.ti,ab,kw.
49	exp ULTRASONOGRAPHY/
50	(ultraso\$ or echo\$ or sono\$ or flowmet\$ or doppler\$).ti,ab,kw.
51	uss.ab,ti,kw.
52	ELASTICITY IMAGING TECHNIQUES/
53	elastogra\$.ab,ti,kw.
54	Fibroscan.ab,ti,kw.
55	or/13-54
56	4 and 12 and 55
57	exp LIVER DISEASES/di, us [Diagnosis, Ultrasonography]
58	4 and 57
59	56 or 58

- Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to December 30, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw,tx,kw.
3	mucov\$.tw,tx,kw.
4	or/1-3
5	LIVER DISEASES.kw.
6	(liver adj3 (disease? or dysfunction? or abnormal\$ or fail\$ or decompensation)).tw,tx,kw.
7	(hypertension? adj3 portal).tw,tx,kw.
8	((fibros?s or fibrocyst\$ or cirrhos?s) adj3 (liver or hepatic)).tw,tx,kw.
9	hepatomegaly.tw,tx,kw.
10	ESOPHAGEAL.mp. and GASTRIC VARICES.kw. [mp=ti, ot, ab, tx, kw, ct]
11	((oesophageal or esophageal) adj3 varice?).tw,tx,kw.
12	or/5-11
13	PHYSICAL EXAMINATION.kw.
14	(exam? or examin\$).tw,tx,kw.
15	LIVER FUNCTION TESTS.kw.
16	liver function test?.tw,tx,kw.
17	LFT?.tw,tx,kw.
18	(liver enzyme? adj5 (measur\$ or test\$)).tw,tx,kw.
19	ALANINE TRANSAMINASE.kw.
20	alanine transaminase?.tw,tx,kw.
21	alanine aminotransferase.tw,tx,kw.
22	ALT.tw,tx,kw.
23	ASPARTATE AMINOTRANSFERASES.kw.
24	aspartate aminotransferase?.tw,tx,kw.
25	aspartate transaminase?.tw,tx,kw.

#	Searches
26	AST.tw,tx,kw.
27	ALKALINE PHOSPHATASE.kw.
28	alkaline phosphatase?.tw,tx,kw.
29	ALP.tw,tx,kw.
30	GAMMA-GLUTAMYLTRANSFERASE.kw.
31	Gam?a glutamyltransferase?.tw,tx,kw.
32	Gam?a glutamyl transferase?.tw,tx,kw.
33	GMT.tw,tx,kw.
34	gam?a glutamyltranspeptidase?.tw,tx,kw.
35	gam?a glutamyl transpeptidase?.tw,tx,kw.
36	GGT.tw,tx,kw.
37	GLUTATHIONE TRANSFERASE.kw.
38	(glutathione adj2 transferase?).tw,tx,kw.
39	GST.tw,tx,kw.
40	BILIRUBIN.kw.
41	bilirubin.tw,tx,kw.
42	INTERNATIONAL NORMALIZED RATIO.kw.
43	international normali?ed ratio?.tw,tx,kw.
44	INR.tw,tx,kw.
45	ALBUMINS.kw.
46	albumin?.tw,tx,kw.
47	BLOOD PLATELETS.kw.
48	platelet?.tw,tx,kw.
49	ULTRASONOGRAPHY.kw.
50	(ultraso\$ or echo\$ or sono\$ or flowmet\$ or doppler\$).tw,tx,kw.
51	uss.tw,tx,kw.
52	ELASTICITY IMAGING TECHNIQUES.kw.
53	elastogra\$.tw,tx,kw.
54	Fibroscan.tw,tx,kw.
55	or/13-54
56	4 and 12 and 55

- Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment** 4th Quarter 2016 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	exp LIVER DISEASES/
6	(liver adj3 (disease? or dysfunction? or abnormal\$ or fail\$ or decompensation)).tw.
7	(hypertension? adj3 portal).tw.
8	((fibros?s or fibrocyst\$ or cirrhos?s) adj3 (liver or hepatic)).tw.
9	hepatomegaly.tw.
10	"ESOPHAGEAL AND GASTRIC VARICES"/

#	Searches
11	((oesophageal or esophageal) adj3 varice?).tw.
12	or/5-11
13	exp PHYSICAL EXAMINATION/
14	(exam? or examin\$).tw.
15	LIVER FUNCTION TESTS/
16	liver function test?.tw.
17	LFT?.tw.
18	(liver enzyme? adj5 (measur\$ or test\$)).tw.
19	ALANINE TRANSAMINASE/
20	alanine transaminase?.tw.
21	alanine aminotransferase.tw.
22	ALT.tw.
23	ASPARTATE AMINOTRANSFERASES/
24	aspartate aminotransferase?.tw.
25	aspartate transaminase?.tw.
26	AST.tw.
27	ALKALINE PHOSPHATASE/
28	alkaline phosphatase?.tw.
29	ALP.tw.
30	GAMMA-GLUTAMYLTRANSFERASE/
31	Gam?a glutamyltransferase?.tw.
32	Gam?a glutamyl transferase?.tw.
33	GMT.tw.
34	gam?a glutamyltranspeptidase?.tw.
35	gam?a glutamyl transpeptidase?.tw.
36	GGT.tw.
37	GLUTATHIONE TRANSFERASE/
38	(glutathione adj2 transferase?).tw.
39	GST.tw.
40	BILIRUBIN/
41	bilirubin.tw.
42	INTERNATIONAL NORMALIZED RATIO/
43	international normali?ed ratio?.tw.
44	INR.tw.
45	ALBUMINS/
46	albumin?.tw.
47	BLOOD PLATELETS/
48	platelet?.tw.
49	exp ULTRASONOGRAPHY/
50	(ultraso\$ or echo\$ or sono\$ or flowmet\$ or doppler\$).tw.
51	uss.tw.
52	ELASTICITY IMAGING TECHNIQUES/
53	elastogra\$.tw.
54	Fibroscan.tw.
55	or/13-54

#	Searches
56	4 and 12 and 55
57	exp LIVER DISEASES/di, us [Diagnosis, Ultrasonography]
58	4 and 57
59	56 or 58

- Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	*CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp *LIVER DISEASE/
6	(liver adj3 (disease? or dysfunction? or abnormal\$ or fail\$ or decompensation)).ab,ti.
7	(hypertension? adj3 portal).ab,ti.
8	((fibros?s or fibrocyst\$ or cirrhos?s) adj3 (liver or hepatic)).ab,ti.
9	hepatomegaly.ti,ab.
10	*ESOPHAGUS VARICES/
11	((oesophageal or esophageal) adj3 varice?).ti,ab.
12	or/5-11
13	*CLINICAL EXAMINATION/
14	exp *PHYSICAL EXAMINATION/
15	(exam? or examin\$).ti,ab.
16	*LIVER FUNCTION TEST/
17	liver function test?.ti,ab.
18	LFT?.ti,ab.
19	(liver enzyme? adj5 (measur\$ or test\$)).ti,ab.
20	*ALANINE AMINOTRANSFERASE/
21	alanine transaminase?.ti,ab,tn.
22	alanine aminotransferase.ti,ab,tn.
23	ALT.ti,ab,tn.
24	*ASPARTATE AMINOTRANSFERASE/
25	aspartate aminotransferase?.ti,ab,tn.
26	aspartate transaminase?.ti,ab,tn.
27	AST.ti,ab,tn.
28	*ALKALINE PHOSPHATASE/
29	alkaline phosphatase?.ti,ab,tn.
30	ALP.ti,ab,tn.
31	*GAMMA GLUTAMYLTRANSFERASE/
32	Gam?a glutamyltransferase?.ti,ab,tn.
33	Gam?a glutamyl transferase?.ti,ab,tn.
34	GMT.ti,ab,tn.
35	gam?a glutamyltranspeptidase?.ti,ab,tn.
36	gam?a glutamyl transpeptidase?.ti,ab,tn.
37	GGT.ti,ab,tn.
38	*GLUTATHIONE TRANSFERASE/

#	Searches
39	(glutathione adj2 transferase?).ti,ab,tn.
40	GST.ti,ab,tn.
41	*BILIRUBIN/
42	bilirubin.ti,ab,tn.
43	*INTERNATIONAL NORMALIZED RATIO/
44	international normali?ed ratio?.ti,ab,tn.
45	INR.ti,ab,tn.
46	*ALBUMINOID/
47	albumin?.ti,ab,tn.
48	*THROMBOCYTE/
49	platelet?.ti,ab.
50	exp *ECHOGRAPHY/
51	*ULTRASOUND/
52	(ultraso\$ or echo\$ or sono\$ or flowmet\$ or doppler\$).ti,ab,dv.
53	uss.ab,ti,dv.
54	elastogra\$.ab,ti,dv.
55	Fibroscan.ab,ti,dv.
56	or/13-55
57	4 and 12 and 56
58	exp *LIVER DISEASE/di [Diagnosis]
59	4 and 58
60	57 or 59
61	limit 60 to english language
62	letter.pt. or LETTER/
63	note.pt.
64	editorial.pt.
65	CASE REPORT/ or CASE STUDY/
66	(letter or comment*).ti.
67	or/62-66
68	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
69	67 not 68
70	ANIMAL/ not HUMAN/
71	NONHUMAN/
72	exp ANIMAL EXPERIMENT/
73	exp EXPERIMENTAL ANIMAL/
74	ANIMAL MODEL/
75	exp RODENT/
76	(rat or rats or mouse or mice).ti.
77	or/69-76
78	61 not 77

E.11 What is the effectiveness of ursodeoxycholic acid for preventing liver disease progression in people with cystic fibrosis?

E.11.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to October Week 3 2016 on 1st November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	URSODEOXYCHOLIC ACID/
6	(urso\$ or destolit or ursofalk or ursogal or urdox).mp.
7	UDCA.ti,ab.
8	or/5-7
9	and/4,8
10	limit 9 to english language
11	LETTER/
12	EDITORIAL/
13	NEWS/
14	exp HISTORICAL ARTICLE/
15	ANECDOTES AS TOPIC/
16	COMMENT/
17	CASE REPORT/
18	(letter or comment* or abstracts).ti.
19	or/11-18
20	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
21	19 not 20
22	ANIMALS/ not HUMANS/
23	exp ANIMALS, LABORATORY/
24	exp ANIMAL EXPERIMENTATION/
25	exp MODELS, ANIMAL/
26	exp RODENTIA/
27	(rat or rats or mouse or mice).ti.
28	or/21-27
29	10 not 28

E.11.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** October 31, 2016 on 1st November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	or/1-2
4	(urso\$ or destolit or ursofalk or ursogal or urdox).mp.

#	Searches
5	UDCA.ti,ab.
6	or/4-5
7	and/3,6

E.11.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** September 2016 on 1st November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab.
4	or/1-3
5	URSODEOXYCHOLIC ACID/
6	(urso\$ or destolit or ursofalk or ursogal or urdox).mp.
7	UDCA.ti,ab.
8	or/5-6
9	and/4,8

E.11.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to October 26, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 1st November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw,tx,kw.
2	mucov\$.tw,tx.
3	or/1-2
4	(urso\$ or destolit or ursofalk or ursogal or urdox).mp.
5	UDCA.tw,tx.
6	or/4-5
7	and/3,6

E.11.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 3rd Quarter 2016** on 1st November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	URSODEOXYCHOLIC ACID/
6	(urso\$ or destolit or ursofalk or ursogal or urdox).tw,hw.
7	UDCA.tw.
8	or/5-7
9	and/4,8

E.11.6 Database: Embase

Last searched on **Embase** 1974 to 2016 Week 44 on 1st November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	mucov\$.ti,ab.
3	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
4	or/1-3
5	URSODEOXYCHOLIC ACID/
6	(urso\$ or destolit or ursofalk or ursogal or urdox).mp.
7	UDCA.ti,ab.
8	or/5-7
9	and/4,8
10	limit 9 to english language
11	conference abstract.pt.
12	letter.pt. or LETTER/
13	note.pt.
14	editorial.pt.
15	CASE REPORT/ or CASE STUDY/
16	(letter or comment* or abstracts).ti.
17	or/11-16
18	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
19	17 not 18
20	ANIMAL/ not HUMAN/
21	NONHUMAN/
22	exp ANIMAL EXPERIMENT/
23	exp EXPERIMENTAL ANIMAL/
24	ANIMAL MODEL/
25	exp RODENT/
26	(rat or rats or mouse or mice).ti.
27	or/19-26
28	10 not 27

E.12 What is the most effective strategy to monitor for the onset of CF-related diabetes (CFRD)?

E.12.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to October Week 3 2016 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp DIABETES MELLITUS/
6	diabet\$.ti,ab.
7	or/5-6

#	Searches
8	and/4,7
9	CFRD.ti,ab.
10	or/8-9
11	exp MASS SCREENING/
12	exp POPULATION SURVEILLANCE/
13	(undiagnos\$ or estimate\$ or suspect\$.ti.
14	(screen\$ or surveill\$ or predict\$ or detect\$.ti.
15	monitor\$.ti,ab.
16	or/11-15
17	and/10,16
18	exp GLYCOSURIA/
19	((glucose or sugar\$) adj2 urine).ti,ab.
20	GLUCOSE TOLERANCE TEST/
21	GLUCOSE INTOLERANCE/di
22	glucose intoleran\$.ti,ab.
23	((impair\$ or abnormal\$) adj glucose tolerance).ti,ab.
24	IGT.ti,ab.
25	(glyc?emi\$ adj2 status).ti,ab.
26	(insulin adj2 (deficien\$ or declin\$ or resist\$ or abnormal\$)).ti,ab.
27	(fast\$ adj2 hyperglyc?emi\$).ti,ab.
28	CFRD FH.ti,ab.
29	BLOOD GLUCOSE/an [Analysis]
30	((random or fast\$ or oral) adj2 blood glucose).ti,ab.
31	((continu\$ or serial) adj2 glucose).ti,ab.
32	"oral glucose tolerance test\$.ti,ab.
33	(glucose adj2 (monitor\$ or self monitor\$)).ti,ab.
34	(OGTT or CGM or CGMS).ti,ab.
35	HEMOGLOBIN A, GLYCOSYLATED/
36	(HbA1c or Hb1c or HGBA1C).ti,ab.
37	((glycated or glycosylated) adj2 (haemoglobin or hemoglobin)).ti,ab.
38	or/18-37
39	and/10,38
40	or/17,39
41	limit 40 to english language
42	LETTER/
43	EDITORIAL/
44	NEWS/
45	exp HISTORICAL ARTICLE/
46	ANECDOTES AS TOPIC/
47	COMMENT/
48	CASE REPORT/
49	(letter or comment*).ti.
50	or/42-49
51	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
52	50 not 51

#	Searches
53	ANIMALS/ not HUMANS/
54	exp ANIMALS, LABORATORY/
55	exp ANIMAL EXPERIMENTATION/
56	exp MODELS, ANIMAL/
57	exp RODENTIA/
58	(rat or rats or mouse or mice).ti.
59	or/52-58
60	41 not 59

E.12.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations**
 November 06, 2016 on 8th November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	1 or 2
4	diabet\$.ti,ab.
5	CFRD.ti,ab.
6	3 and 4
7	5 or 6
8	(undiagnos\$ or estimate\$ or suspect\$.ti.
9	(screen\$ or surveill\$ or predict\$ or detect\$.ti.
10	monitor\$.ti,ab.
11	or/8-10
12	7 and 11
13	((glucose or sugar\$) adj2 urine).ti,ab.
14	glucose intoleran\$.ti,ab.
15	((impair\$ or abnormal\$) adj glucose tolerance).ti,ab.
16	IGT.ti,ab.
17	(glyc?emi\$ adj2 status).ti,ab.
18	(insulin adj2 (deficien\$ or declin\$ or resist\$ or abnormal\$)).ti,ab.
19	(fast\$ adj2 hyperglyc?emi\$).ti,ab.
20	CFRD FH.ti,ab.
21	((random or fast\$ or oral) adj2 blood glucose).ti,ab.
22	((continu\$ or serial) adj2 glucose).ti,ab.
23	"oral glucose tolerance test".ti,ab.
24	(glucose adj2 (monitor\$ or self monitor\$)).ti,ab.
25	(OGTT or CGM or CGMS).ti,ab.
26	(HbA1c or Hb1c or HGBA1C).ti,ab.
27	((glycated or glycosylated) adj2 (haemoglobin or hemoglobin)).ti,ab.
28	or/13-27
29	7 and 28
30	12 or 29
31	limit 30 to english language

E.12.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials**
 October 2016 on 29th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp DIABETES MELLITUS/
6	diabet\$.ti,ab.
7	or/5-6
8	and/4,7
9	CFRD.ti,ab.
10	or/8-9
11	exp MASS SCREENING/
12	exp POPULATION SURVEILLANCE/
13	(undiagnos\$ or estimate\$ or suspect\$).ti.
14	(screen\$ or surveill\$ or predict\$ or detect\$).ti.
15	monitor\$.ti,ab.
16	or/11-15
17	and/10,16
18	exp GLYCOSURIA/
19	((glucose or sugar\$) adj2 urine).ti,ab.
20	GLUCOSE TOLERANCE TEST/
21	GLUCOSE INTOLERANCE/di
22	glucose intoleran\$.ti,ab.
23	((impair\$ or abnormal\$) adj glucose tolerance).ti,ab.
24	IGT.ti,ab.
25	(glyc?emi\$ adj2 status).ti,ab.
26	(insulin adj2 (deficien\$ or declin\$ or resist\$ or abnormal\$)).ti,ab.
27	(fast\$ adj2 hyperglyc?emi\$).ti,ab.
28	CFRD FH.ti,ab.
29	BLOOD GLUCOSE/an [Analysis]
30	((random or fast\$ or oral) adj2 blood glucose).ti,ab.
31	((continu\$ or serial) adj2 glucose).ti,ab.
32	"oral glucose tolerance test\$.ti,ab.
33	(glucose adj2 (monitor\$ or self monitor\$)).ti,ab.
34	(OGTT or CGM or CGMS).ti,ab.
35	HEMOGLOBIN A, GLYCOSYLATED/
36	(HbA1c or Hb1c or HGBA1C).ti,ab.
37	((glycated or glycosylated) adj2 (haemoglobin or hemoglobin)).ti,ab.
38	or/18-37
39	and/10,38
40	or/17,39
41	limit 40 to english language

E.12.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to November 02, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	DIABETES MELLITUS.kw.
6	diabet\$.ti,ab.
7	or/5-6
8	and/4,7
9	CFRD.ti,ab.
10	or/8-9
11	MASS SCREENING.kw.
12	POPULATION SURVEILLANCE.kw.
13	(undiagnos\$ or estimate\$ or suspect\$.ti.
14	(screen\$ or surveill\$ or predict\$ or detect\$.ti.
15	monitor\$.ti,ab.
16	or/11-15
17	and/10,16
18	GLYCOSURIA.kw.
19	((glucose or sugar\$) adj2 urine).ti,ab.
20	GLUCOSE TOLERANCE TEST.kw.
21	GLUCOSE INTOLERANCE.kw.
22	glucose intoleran\$.ti,ab.
23	((impair\$ or abnormal\$) adj glucose tolerance).ti,ab.
24	IGT.ti,ab.
25	(glyc?emi\$ adj2 status).ti,ab.
26	(insulin adj2 (deficien\$ or declin\$ or resist\$ or abnormal\$)).ti,ab.
27	(fast\$ adj2 hyperglyc?emi\$).ti,ab.
28	CFRD FH.ti,ab.
29	BLOOD GLUCOSE.kw.
30	((random or fast\$ or oral) adj2 blood glucose).ti,ab.
31	((continu\$ or serial) adj2 glucose).ti,ab.
32	"oral glucose tolerance test".ti,ab.
33	(glucose adj2 (monitor\$ or self monitor\$)).ti,ab.
34	(OGTT or CGM or CGMS).ti,ab.
35	HEMOGLOBIN A, GLYCOSYLATED.kw.
36	(HbA1c or Hb1c or HGBA1C).ti,ab.
37	((glycated or glycosylated) adj2 (haemoglobin or hemoglobin)).ti,ab.
38	or/18-37
39	and/10,38
40	or/17,39

E.12.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 3rd Quarter 2016** on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp DIABETES MELLITUS/
6	diabet\$.ti,ab.
7	or/5-6
8	and/4,7
9	CFRD.ti,ab.
10	or/8-9
11	exp MASS SCREENING/
12	exp POPULATION SURVEILLANCE/
13	(undiagnos\$ or estimate\$ or suspect\$.ti.
14	(screen\$ or surveill\$ or predict\$ or detect\$.ti.
15	monitor\$.ti,ab.
16	or/11-15
17	and/10,16
18	exp GLYCOSURIA/
19	((glucose or sugar\$) adj2 urine).ti,ab.
20	GLUCOSE TOLERANCE TEST/
21	GLUCOSE INTOLERANCE/
22	glucose intoleran\$.ti,ab.
23	((impair\$ or abnormal\$) adj glucose tolerance).ti,ab.
24	IGT.ti,ab.
25	(glyc?emi\$ adj2 status).ti,ab.
26	(insulin adj2 (deficien\$ or declin\$ or resist\$ or abnormal\$)).ti,ab.
27	(fast\$ adj2 hyperglyc?emi\$.ti,ab.
28	CFRD FH.ti,ab.
29	BLOOD GLUCOSE/an [Analysis]
30	((random or fast\$ or oral) adj2 blood glucose).ti,ab.
31	((continu\$ or serial) adj2 glucose).ti,ab.
32	"oral glucose tolerance test".ti,ab.
33	(glucose adj2 (monitor\$ or self monitor\$)).ti,ab.
34	(OGTT or CGM or CGMS).ti,ab.
35	HEMOGLOBIN A, GLYCOSYLATED/
36	(HbA1c or Hb1c or HGBA1C).ti,ab.
37	((glycated or glycosylated) adj2 (haemoglobin or hemoglobin)).ti,ab.
38	or/18-37
39	and/10,38
40	or/17,39

E.12.6 Database: Embase

Last searched on **Embase** 1974 to 2016 Week 44 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	mucov\$.ti,ab.
3	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
4	or/1-3
5	exp diabetes mellitus/
6	diabet\$.ti,ab.
7	5 or 6
8	4 and 7
9	CFRD.ti,ab.
10	8 or 9
11	exp mass screening/
12	exp health survey/
13	(undiagnos\$ or estimate\$ or suspect\$).ti.
14	(screen\$ or surveill\$ or predict\$ or detect\$).ti.
15	monitor\$.ti,ab.
16	or/11-15
17	10 and 16
18	glucosuria/
19	((glucose or sugar\$) adj2 urine).ti,ab.
20	exp glucose tolerance test/
21	glucose intolerance/di [Diagnosis]
22	glucose intoleran\$.ti,ab.
23	((impair\$ or abnormal\$) adj glucose tolerance).ti,ab.
24	IGT.ti,ab.
25	(glyc?emi\$ adj2 status).ti,ab.
26	(insulin adj2 (deficien\$ or declin\$ or resist\$ or abnormal\$)).ti,ab.
27	(fast\$ adj2 hyperglyc?emi\$).ti,ab.
28	CFRD FH.ti,ab.
29	glucose blood level/
30	((random or fast\$ or oral) adj2 blood glucose).ti,ab.
31	((continu\$ or serial) adj2 glucose).ti,ab.
32	"oral glucose tolerance test\$.ti,ab.
33	(glucose adj2 (monitor\$ or self monitor\$)).ti,ab.
34	(OGTT or CGM or CGMS).ti,ab.
35	glycosylated hemoglobin/
36	(HbA1c or Hb1c or HGBA1C).ti,ab.
37	((glycated or glycosylated) adj2 (haemoglobin or hemoglobin)).ti,ab.
38	or/18-37
39	10 and 38
40	17 or 39
41	limit 40 to english language
42	letter.pt. or LETTER/
43	note.pt.

#	Searches
44	editorial.pt.
45	CASE REPORT/ or CASE STUDY/
46	(letter or comment*).ti.
47	or/42-46
48	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
49	47 not 48
50	ANIMAL/ not HUMAN/
51	NONHUMAN/
52	exp ANIMAL EXPERIMENT/
53	exp EXPERIMENTAL ANIMAL/
54	ANIMAL MODEL/
55	exp RODENT/
56	(rat or rats or mouse or mice).ti.
57	or/49-56
58	41 not 57

E.13 What is the most effective strategy to monitor for the identification of reduced bone mineral density in people with cystic fibrosis?

E.13.1 Database: Medline

Last searched on Ovid MEDLINE(R) 1946 to October Week 4 2016 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp BONE DISEASES, METABOLIC/
6	BONE DENSITY/
7	exp FRACTURES, BONE/
8	exp BONE RESORPTION/
9	exp VITAMIN D DEFICIENCY/
10	(bone? adj2 (dens\$ or mass)).ti,ab.
11	(bone? adj3 (deminerali\$ or de minerali\$ or decalcif\$ or de calcif\$ or fractur\$ or fragil\$ or loss or atroph\$)).ti,ab.
12	(osteoporo\$ or osteop?en\$ or osteoly\$).ti,ab.
13	((fragil\$ or pathologic\$ or spontaneous\$) adj2 fractur\$).ti,ab.
14	((vitamin D or calcium) adj3 deficien\$).ti,ab.
15	or/5-14
16	ABSORPTIOMETRY, PHOTON/
17	((x ray or xray or photon or DPX or dual energy or radiograph\$) adj2 (absorptio\$ or densit\$ or photodensit\$)).ti,ab.
18	(DEXA or DXA).ti,ab.

#	Searches
19	(pQCT or HR pQCT or HRpQCT).ti,ab.
20	peripheral quantitative compute\$ tomogra\$.ti,ab.
21	or/16-20
22	4 and 15 and 21
23	limit 22 to english language
24	LETTER/
25	EDITORIAL/
26	NEWS/
27	exp HISTORICAL ARTICLE/
28	ANECDOTES AS TOPIC/
29	COMMENT/
30	CASE REPORT/
31	(letter or comment*).ti.
32	or/24-31
33	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
34	32 not 33
35	ANIMALS/ not HUMANS/
36	exp ANIMALS, LABORATORY/
37	exp ANIMAL EXPERIMENTATION/
38	exp MODELS, ANIMAL/
39	exp RODENTIA/
40	(rat or rats or mouse or mice).ti.
41	or/34-40
42	27 not 41

E.13.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations November 07, 2016 on 8th November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	1 or 2
4	(bone? adj2 (dens\$ or mass)).ti,ab.
5	(bone? adj3 (deminerali\$ or de minerali\$ or decalcif\$ or de calcif\$ or fractur\$ or fragil\$ or loss or atroph\$)).ti,ab.
6	(osteoporo\$ or osteop?en\$ or osteoly\$).ti,ab.
7	((fragil\$ or pathologic\$ or spontaneous\$) adj2 fractur\$).ti,ab.
8	((vitamin D or calcium) adj3 deficien\$).ti,ab.
9	or/4-8
10	((x ray or xray or photon or DPX or dual energy or radiograph\$) adj2 (absorptio\$ or densit\$ or photodensit\$)).ti,ab.
11	(DEXA or DXA).ti,ab.
12	(pQCT or HR pQCT or HRpQCT).ti,ab.
13	peripheral quantitative compute\$ tomogra\$.ti,ab.
14	or/10-13
15	3 and 9 and 14

#	Searches
16	limit 15 to english language

E.13.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** October 2016 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ab,ti,kw.
3	mucov\$.ab,ti,kw.
4	or/1-3
5	exp Bone Diseases, Metabolic/
6	Bone Density/
7	exp Fractures, Bone/
8	exp Bone Resorption/
9	exp Vitamin D Deficiency/
10	(bone? adj2 (dens\$ or mass)).ti,ab.
11	(bone? adj3 (deminerali\$ or de minerali\$ or decalcif\$ or de calcif\$ or fractur\$ or fragil\$ or loss or atroph\$)).ti,ab.
12	(osteoporos\$ or osteop?en\$ or osteoly\$).ti,ab.
13	((fragil\$ or pathologic\$ or spontaneous\$) adj2 fractur\$).ti,ab.
14	((vitamin D or calcium) adj3 deficien\$).ti,ab.
15	or/5-14
16	ABSORPTIOMETRY, PHOTON/
17	((x ray or xray or photon or DPX or dual energy or radiograph\$) adj2 (absorptio\$ or densit\$ or photodensit\$)).ti,ab.
18	(DEXA or DXA).ti,ab.
19	(pQCT or HR pQCT or HRpQCT).ti,ab.
20	peripheral quantitative computed tomogra\$.ti,ab.
21	or/16-20
22	4 and 15 and 21
23	limit 22 to english language

E.13.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to November 07, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects 1st Quarter 2015** on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).mp.
3	mucov\$.mp.
4	or/1-3
5	Bone Diseases, Metabolic.kw.
6	Bone Density.kw.
7	Fractures, Bone.kw.
8	Bone Resorption.kw.

#	Searches
9	Osteolysis.kw.
10	vitamin d deficiency.kw.
11	(bone? adj2 (dens\$ or mass)).mp.
12	(bone? adj3 (deminerali\$ or de minerali\$ or decalcif\$ or de calcif\$ or fractur\$ or fragil\$ or loss or atroph\$)).mp.
13	(osteoporo\$ or osteop?en\$ or osteoly\$).mp.
14	((fragil\$ or pathologic\$ or spontaneous\$) adj2 fractur\$).mp.
15	((vitamin D or calcium) adj3 deficien\$).mp.
16	or/5-15
17	Absorptiometry, Photon.kw.
18	((x ray or xray or photon or DPX or dual energy or radiograph\$) adj2 (absorptio\$ or densit\$ or photodensit\$)).mp.
19	(DEXA or DXA).mp.
20	(pQCT or HR pQCT or HRpQCT).mp.
21	peripheral quantitative computed tomogra\$.mp.
22	or/17-21
23	4 and 16 and 22

E.13.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	exp Bone Diseases, Metabolic/
6	Bone Density/
7	exp Fractures, Bone/
8	exp Bone Resorption/
9	exp Vitamin D Deficiency/
10	(bone? adj2 (dens\$ or mass)).tw.
11	(bone? adj3 (deminerali\$ or de minerali\$ or decalcif\$ or de calcif\$ or fractur\$ or fragil\$ or loss or atroph\$)).tw.
12	(osteoporo\$ or osteop?en\$ or osteoly\$).tw.
13	((fragil\$ or pathologic\$ or spontaneous\$) adj2 fractur\$).tw.
14	((vitamin D or calcium) adj3 deficien\$).tw.
15	or/5-14
16	ABSORPTIOMETRY, PHOTON/
17	((x ray or xray or photon or DPX or dual energy or radiograph\$) adj2 (absorptio\$ or densit\$ or photodensit\$)).tw.
18	(DEXA or DXA).tw.
19	(pQCT or HR pQCT or HRpQCT).tw.
20	peripheral quantitative compute\$ tomogra\$.tw.
21	or/16-20
22	4 and 15 and 21

E.13.6 Database: Embase

Last searched on **Embase** 1974 to 2016 Week 45 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	mucov\$.ti,ab.
3	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
4	or/1-3
5	exp metabolic bone disease/
6	bone density/
7	exp fracture/
8	osteolysis/
9	exp bone demineralization/
10	vitamin D deficiency/
11	bone densitometry/
12	(bone? adj2 (dens\$ or mass)).ti,ab.
13	(bone? adj3 (deminerali\$ or de minerali\$ or decalcif\$ or de calcif\$ or fractur\$ or fragil\$ or loss or atroph\$)).ti,ab.
14	(osteoporos\$ or osteop?en\$ or osteoly\$).ti,ab.
15	((fragil\$ or pathologic\$ or spontaneous\$) adj2 fractur\$).ti,ab.
16	((vitamin D or calcium) adj3 deficien\$).ti,ab.
17	or/5-16
18	photon absorptiometry/
19	dual energy X ray absorptiometry/
20	((x ray or xray or photon or DPX or dual energy or radiograph\$) adj2 (absorptio\$ or densit\$ or photodensit\$)).ti,ab.
21	(DEXA or DXA).ti,ab.
22	high resolution computer tomography/
23	(pQCT or HR pQCT or HRpQCT).ti,ab.
24	peripheral quantitative compute\$ tomogra\$.ti,ab.
25	or/18-24
26	4 and 17 and 25
27	limit 26 to english language
28	letter.pt. or LETTER/
29	note.pt.
30	editorial.pt.
31	CASE REPORT/ or CASE STUDY/
32	(letter or comment*).ti.
33	or/28-32
34	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
35	33 not 34
36	ANIMAL/ not HUMAN/
37	NONHUMAN/
38	exp ANIMAL EXPERIMENT/
39	exp EXPERIMENTAL ANIMAL/
40	ANIMAL MODEL/
41	exp RODENT/

#	Searches
42	(rat or rats or mouse or mice).ti.
43	or/35-42
44	27 not 43

E.14 What strategies are effective at identifying people with cystic fibrosis for the presence of a psychological and/or behavioural problem?

E.14.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to October Week 3 2016 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	MENTAL HEALTH/
6	exp MENTAL DISORDERS/
7	ADAPTATION, PSYCHOLOGICAL/
8	(mental\$ adj2 health?).ab,ti.
9	((Mental\$ or Adjust\$ or Anxiety or Obsessive\$ or Compulsive\$ or Panic\$ or Phobi? or Stress\$ or Dissociative or Eating or food or Binge or Factitious or Impuls\$ or Mood\$ or Affective or Neurotic or Personality or Paranoid or Psychotic or Sexual\$ or Gender or Sleep\$ or Somatoform or Body Dysmorphi? or Conversion) adj3 Disorder?).ab,ti.
10	((Substance? or drug? or Alcohol or Tobacco) adj3 (Disorder? or misus\$ or abus\$)).ab,ti.
11	(Agoraphobi\$ or Anorexi\$ or Bulimi\$ or Schizophreni\$ or Dyssomni\$ or Parasomni\$ or Neurastheni\$).ab,ti.
12	((avoid\$ or restrict\$) adj3 food?).ti,ab.
13	DEPRESSION/
14	depress\$.ab,ti.
15	mood?.ti,ab.
16	ANXIETY/
17	anxiety\$.ti,ab.
18	NEEDLES/
19	needle?.ti,ab.
20	PATIENT COMPLIANCE/
21	MEDICATION ADHERENCE/
22	TREATMENT REFUSAL/
23	((adhere\$ or nonadher\$ or complia\$ or comply\$ or noncomplia\$ or noncomply\$ or cooperat\$ or co-operat\$) adj3 (patient? or medication? or treat\$)).ti,ab.
24	(refus\$ adj3 treat\$).ti,ab.
25	ABSENTEEISM/
26	(School\$ adj3 (refus\$ or absen\$)).ti,ab.
27	truancy\$.ti,ab.
28	or/5-27
29	MASS SCREENING/

#	Searches
30	screen\$.ab,ti.
31	exp QUESTIONNAIRES/
32	(questionnaire? or self report\$).ab,ti.
33	(clinical\$ adj3 assess\$).ti,ab.
34	or/29-33
35	4 and 28 and 34
36	(Generalized Anxiety Disorder 7 or Generalized Anxiety Disorder seven or GAD-7 or Patient Health Questionnaire 2 or Patient Health Questionnaire two or PHQ-2 or Patient Health Questionnaire 9 or Patient Health Questionnaire nine or PHQ-9 or (Hospital Anxiety and Depression Scale?) or HADS or P?ediatric Index of Emotional Distress or PI-ED or Cystic Fibrosis Questionnaire Revised or CFQ-R or Cystic Fibrosis Quality of Life Questionnaire or CFQOL or Centre for Epidemiologic Studies Depression Score or CES-D or Eating Disorders Examination or EDE or Child Eating Disorders Examination or CEDE or Eating Attitudes Test or Child Eating Attitude Test or ChEAT or (Cystic fibrosis eating attitudes and behaviours) or CFEAB).ti,ab.
37	4 and 36
38	MENTAL DISORDERS/di [Diagnosis]
39	MENTAL DISORDERS/ep [Epidemiology]
40	DEPRESSION/di [Diagnosis]
41	DEPRESSION/ep [Epidemiology]
42	((mental\$ health or depress\$) adj5 (Identif\$ or assess\$ or diagnos\$)).ab,ti.
43	or/38-42
44	4 and 43
45	35 or 37 or 44
46	limit 45 to english language
47	LETTER/
48	EDITORIAL/
49	NEWS/
50	exp HISTORICAL ARTICLE/
51	ANECDOTES AS TOPIC/
52	COMMENT/
53	CASE REPORT/
54	(letter or comment*).ti.
55	or/47-54
56	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
57	55 not 56
58	ANIMALS/ not HUMANS/
59	exp ANIMALS, LABORATORY/
60	exp ANIMAL EXPERIMENTATION/
61	exp MODELS, ANIMAL/
62	exp RODENTIA/

E.14.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations**
 November 02, 2016 on 8th November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.

#	Searches
2	mucov\$.ti,ab.
3	or/1-2
4	(mental\$ adj2 health?).ab,ti.
5	((Mental\$ or Adjust\$ or Anxiety or Obsessive\$ or Compulsive\$ or Panic\$ or Phobi? or Stress\$ or Dissociative or Eating or food or Binge or Factitious or Impuls\$ or Mood\$ or Affective or Neurotic or Personality or Paranoid or Psychotic or Sexual\$ or Gender or Sleep\$ or Somatoform or Body Dysmorphi? or Conversion) adj3 Disorder?).ab,ti.
6	((Substance? or drug? or Alcohol or Tobacco) adj3 (Disorder? or misus\$ or abus\$)).ab,ti.
7	(Agoraphobi\$ or Anorexi\$ or Bulimi\$ or Schizophreni\$ or Dyssomni\$ or Parasomni\$ or Neurastheni\$).ab,ti.
8	((avoid\$ or restrict\$) adj3 food?).ti,ab.
9	depress\$.ab,ti.
10	mood?.ti,ab.
11	anxiet\$.ti,ab.
12	needle?.ti,ab.
13	((adhere\$ or nonadher\$ or complia\$ or comply\$ or noncomplia\$ or noncomply\$ or cooperat\$ or co-operat\$) adj3 (patient? or medication? or treat\$)).ti,ab.
14	(refus\$ adj3 treat\$).ti,ab.
15	(School\$ adj3 (refus\$ or absen\$)).ti,ab.
16	truan\$.ti,ab.
17	or/4-16
18	screen\$.ab,ti.
19	(questionnaire? or self report\$).ab,ti.
20	(clinical\$ adj3 assess\$).ti,ab.
21	or/18-20
22	3 and 17 and 21
23	(Generalized Anxiety Disorder 7 or Generalized Anxiety Disorder seven or GAD-7 or Patient Health Questionnaire 2 or Patient Health Questionnaire two or PHQ-2 or Patient Health Questionnaire 9 or Patient Health Questionnaire nine or PHQ-9 or (Hospital Anxiety and Depression Scale?) or HADS or P?ediatric Index of Emotional Distress or PI-ED or Cystic Fibrosis Questionnaire Revised or CFQ-R or Cystic Fibrosis Quality of Life Questionnaire or CFQOL or Centre for Epidemiologic Studies Depression Score or CES-D or Eating Disorders Examination or EDE or Child Eating Disorders Examination or CEDE or Eating Attitudes Test or Child Eating Attitude Test or ChEAT or (Cystic fibrosis eating attitudes and behaviours) or CFEAB).ti,ab.
24	3 and 23
25	((mental\$ health or depress\$) adj5 (Identif\$ or assess\$ or diagnos\$)).ab,ti.
26	3 and 25
27	22 or 24 or 26

E.14.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** September 2016 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab,kw.
4	or/1-3

#	Searches
5	MENTAL HEALTH/
6	exp MENTAL DISORDERS/
7	ADAPTATION, PSYCHOLOGICAL/
8	(mental\$ adj2 health?).ab,ti.
9	((Mental\$ or Adjust\$ or Anxiety or Obsessive\$ or Compulsive\$ or Panic\$ or Phobi? or Stress\$ or Dissociative or Eating or food or Binge or Factitious or Impuls\$ or Mood\$ or Affective or Neurotic or Personality or Paranoid or Psychotic or Sexual\$ or Gender or Sleep\$ or Somatoform or Body Dysmorphi? or Conversion) adj3 Disorder?).ab,ti.
10	((Substance? or drug? or Alcohol or Tobacco) adj3 (Disorder? or misus\$ or abus\$)).ab,ti.
11	(Agoraphobi\$ or Anorexi\$ or Bulimi\$ or Schizophreni\$ or Dyssomni\$ or Parasomni\$ or Neurastheni\$).ab,ti,kw.
12	((avoid\$ or restrict\$) adj3 food?).ti,ab.
13	DEPRESSION/
14	depress\$.ab,ti,kw.
15	mood?.ti,ab,kw.
16	ANXIETY/
17	anxiety\$.ti,ab,kw.
18	NEEDLES/
19	needle?.ti,ab,kw.
20	PATIENT COMPLIANCE/
21	MEDICATION ADHERENCE/
22	TREATMENT REFUSAL/
23	((adhere\$ or nonadher\$ or complia\$ or comply\$ or noncomplia\$ or noncomply\$ or cooperat\$ or co-operat\$) adj3 (patient? or medication? or treat\$)).ti,ab.
24	(refus\$ adj3 treat\$).ti,ab.
25	ABSENTEEISM/
26	(School\$ adj3 (refus\$ or absen\$)).ti,ab.
27	truan\$.ti,ab,kw.
28	or/5-27
29	MASS SCREENING/
30	screen\$.ab,ti,kw.
31	exp QUESTIONNAIRES/
32	(questionnaire? or self report\$).ab,ti,kw.
33	(clinical\$ adj3 assess\$).ti,ab.
34	or/29-33
35	4 and 28 and 34
36	(Generalized Anxiety Disorder 7 or Generalized Anxiety Disorder seven or GAD-7 or Patient Health Questionnaire 2 or Patient Health Questionnaire two or PHQ-2 or Patient Health Questionnaire 9 or Patient Health Questionnaire nine or PHQ-9 or (Hospital Anxiety and Depression Scale?) or HADS or P?ediatric Index of Emotional Distress or PI-ED or Cystic Fibrosis Questionnaire Revised or CFQ-R or Cystic Fibrosis Quality of Life Questionnaire or CFQOL or Centre for Epidemiologic Studies Depression Score or CES-D or Eating Disorders Examination or EDE or Child Eating Disorders Examination or CEDE or Eating Attitudes Test or Child Eating Attitude Test or ChEAT or (Cystic fibrosis eating attitudes and behaviours) or CFEAB).ti,ab.
37	4 and 36
38	MENTAL DISORDERS/di [Diagnosis]
39	MENTAL DISORDERS/ep [Epidemiology]

#	Searches
40	DEPRESSION/di [Diagnosis]
41	DEPRESSION/ep [Epidemiology]
42	((mental\$ health or depress\$) adj5 (Identif\$ or assess\$ or diagnos\$)).ab,ti.
43	or/38-42
44	4 and 43
45	35 or 37 or 44

E.14.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to November 02, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	MENTAL HEALTH.kw.
6	MENTAL DISORDERS.kw.
7	ADAPTATION, PSYCHOLOGICAL.kw.
8	(mental\$ adj2 health?).ab,ti.
9	((Mental\$ or Adjust\$ or Anxiety or Obsessive\$ or Compulsive\$ or Panic\$ or Phobi? or Stress\$ or Dissociative or Eating or food or Binge or Factitious or Impuls\$ or Mood\$ or Affective or Neurotic or Personality or Paranoid or Psychotic or Sexual\$ or Gender or Sleep\$ or Somatoform or Body Dysmorphi? or Conversion) adj3 Disorder?).ab,ti.
10	((Substance? or drug? or Alcohol or Tobacco) adj3 (Disorder? or misus\$ or abus\$)).ab,ti.
11	(Agoraphobi\$ or Anorexi\$ or Bulimi\$ or Schizophreni\$ or Dyssomni\$ or Parasomni\$ or Neurastheni\$).ab,ti.
12	((avoid\$ or restrict\$) adj3 food?).ti,ab.
13	DEPRESSION.kw.
14	depress\$.ab,ti.
15	mood?.ti,ab.
16	ANXIETY.kw.
17	anxiety\$.ti,ab.
18	NEEDLES.kw.
19	needle?.ti,ab.
20	PATIENT COMPLIANCE.kw.
21	MEDICATION ADHERENCE.kw.
22	TREATMENT REFUSAL.kw.
23	((adhere\$ or nonadher\$ or complia\$ or comply\$ or noncomplia\$ or noncomply\$ or cooperat\$ or co-operat\$) adj3 (patient? or medication? or treat\$)).ti,ab.
24	(refus\$ adj3 treat\$).ti,ab.
25	ABSENTEEISM.kw.
26	(School\$ adj3 (refus\$ or absen\$)).ti,ab.
27	truancy\$.ti,ab.
28	or/5-27

#	Searches
29	MASS SCREENING.kw.
30	screen\$.ab,ti.
31	QUESTIONNAIRES.kw.
32	(questionnaire? or self report\$).ab,ti.
33	(clinical\$ adj3 assess\$).ti,ab.
34	or/29-33
35	4 and 28 and 34
36	(Generalized Anxiety Disorder 7 or Generalized Anxiety Disorder seven or GAD-7 or Patient Health Questionnaire 2 or Patient Health Questionnaire two or PHQ-2 or Patient Health Questionnaire 9 or Patient Health Questionnaire nine or PHQ-9 or (Hospital Anxiety and Depression Scale?) or HADS or P?ediatric Index of Emotional Distress or PI-ED or Cystic Fibrosis Questionnaire Revised or CFQ-R or Cystic Fibrosis Quality of Life Questionnaire or CFQOL or Centre for Epidemiologic Studies Depression Score or CES-D or Eating Disorders Examination or EDE or Child Eating Disorders Examination or CEDE or Eating Attitudes Test or Child Eating Attitude Test or ChEAT or (Cystic fibrosis eating attitudes and behaviours) or CFEAB).ti,ab.
37	4 and 36
38	((mental\$ health or depress\$) adj5 (Identif\$ or assess\$ or diagnos\$)).ab,ti.
39	4 and 38
40	35 or 37 or 39

E.14.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 3rd Quarter 2016** on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	MENTAL HEALTH/
6	exp MENTAL DISORDERS/
7	ADAPTATION, PSYCHOLOGICAL/
8	(mental\$ adj2 health?).tw.
9	((Mental\$ or Adjust\$ or Anxiety or Obsessive\$ or Compulsive\$ or Panic\$ or Phobi? or Stress\$ or Dissociative or Eating or food or Binge or Factitious or Impuls\$ or Mood\$ or Affective or Neurotic or Personality or Paranoid or Psychotic or Sexual\$ or Gender or Sleep\$ or Somatoform or Body Dysmorphi? or Conversion) adj3 Disorder?).tw.
10	((Substance? or drug? or Alcohol or Tobacco) adj3 (Disorder? or misus\$ or abus\$)).tw.
11	(Agoraphobi\$ or Anorexi\$ or Bulimi\$ or Schizophreni\$ or Dyssomni\$ or Parasomni\$ or Neurastheni\$).tw.
12	((avoid\$ or restrict\$) adj3 food?).tw.
13	DEPRESSION/
14	depress\$.tw.
15	mood?.tw.
16	ANXIETY/
17	anxiety\$.tw.
18	NEEDLES/
19	needle?.tw.

#	Searches
20	PATIENT COMPLIANCE/
21	MEDICATION ADHERENCE/
22	TREATMENT REFUSAL/
23	((adhere\$ or nonadher\$ or complia\$ or comply\$ or noncomplia\$ or noncomply\$ or cooperat\$ or co-operat\$) adj3 (patient? or medication? or treat\$)).tw.
24	(refus\$ adj3 treat\$).tw.
25	ABSENTEEISM/
26	(School\$ adj3 (refus\$ or absen\$)).tw.
27	truans\$.tw.
28	or/5-27
29	MASS SCREENING/
30	screen\$.tw.
31	exp QUESTIONNAIRES/
32	(questionnaire? or self report\$).tw.
33	(clinical\$ adj3 assess\$).tw.
34	or/29-33
35	4 and 28 and 34
36	(Generalized Anxiety Disorder 7 or Generalized Anxiety Disorder seven or GAD-7 or Patient Health Questionnaire 2 or Patient Health Questionnaire two or PHQ-2 or Patient Health Questionnaire 9 or Patient Health Questionnaire nine or PHQ-9 or (Hospital Anxiety and Depression Scale?) or HADS or P?ediatric Index of Emotional Distress or PI-ED or Cystic Fibrosis Questionnaire Revised or CFQ-R or Cystic Fibrosis Quality of Life Questionnaire or CFQOL or Centre for Epidemiologic Studies Depression Score or CES-D or Eating Disorders Examination or EDE or Child Eating Disorders Examination or CEDE or Eating Attitudes Test or Child Eating Attitude Test or ChEAT or (Cystic fibrosis eating attitudes and behaviours) or CFEAB).tw.
37	4 and 36
38	MENTAL DISORDERS/di [Diagnosis]
39	MENTAL DISORDERS/ep [Epidemiology]
40	DEPRESSION/di [Diagnosis]
41	DEPRESSION/ep [Epidemiology]
42	((mental\$ health or depress\$) adj5 (Identif\$ or assess\$ or diagnos\$)).tw.
43	or/38-42
44	4 and 43
45	35 or 37 or 44

E.14.6 Database: Embase

Last searched on **Embase** 1974 to 2016 Week 44 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp *MENTAL HEALTH/
6	exp *MENTAL DISEASE/
7	*ADAPTIVE BEHAVIOR/
8	(mental\$ adj2 health?).ab,ti.

#	Searches
9	((Mental\$ or Adjust\$ or Anxiety or Obsessive\$ or Compulsive\$ or Panic\$ or Phobi? or Stress\$ or Dissociative or Eating or food or Binge or Factitious or Impuls\$ or Mood\$ or Affective or Neurotic or Personality or Paranoid or Psychotic or Sexual\$ or Gender or Sleep\$ or Somatoform or Body Dysmorphi? or Conversion) adj3 Disorder?).ab,ti.
10	((Substance? or drug? or Alcohol or Tobacco) adj3 (Disorder? or misus\$ or abus\$)).ab,ti.
11	(Agoraphobi\$ or Anorexi\$ or Bulimi\$ or Schizophreni\$ or Dyssomni\$ or Parasomni\$ or Neurastheni\$).ab,ti.
12	((avoid\$ or restrict\$) adj3 food?).ti,ab.
13	exp *DEPRESSION/
14	depress\$.ti.
15	depress\$.ab. /freq=2
16	mood?.ti,ab.
17	*ANXIETY/
18	anxiet\$.ti.
19	anxiet\$.ab. /freq=2
20	*NEEDLE/
21	needle?.ti,ab.
22	*PATIENT COMPLIANCE/
23	*MEDICATION COMPLIANCE/
24	*TREATMENT REFUSAL/
25	((adhere\$ or nonadher\$ or complia\$ or comply\$ or noncomplia\$ or noncomply\$ or cooperat\$ or co-operat\$) adj3 (patient? or medication? or treat\$)).ti,ab.
26	(refus\$ adj3 treat\$).ti,ab.
27	*ABSENTEEISM/
28	(School\$ adj3 (refus\$ or absen\$)).ti,ab.
29	truans\$.ti,ab.
30	or/5-29
31	*SCREENING/
32	exp *MASS SCREENING/
33	*SCREENING TEST/
34	screen\$.ab,ti.
35	exp *QUESTIONNAIRES/
36	(questionnaire? or self report\$).ab,ti.
37	(clinical\$ adj3 assess\$).ti,ab.
38	or/31-37
39	4 and 30 and 38
40	(Generalized Anxiety Disorder 7 or Generalized Anxiety Disorder seven or GAD-7 or Patient Health Questionnaire 2 or Patient Health Questionnaire two or PHQ-2 or Patient Health Questionnaire 9 or Patient Health Questionnaire nine or PHQ-9 or HADS or P?ediatric Index of Emotional Distress or PI-ED or Cystic Fibrosis Questionnaire Revised or Cystic Fibrosis Quality of Life Questionnaire or CFQOL or Centre for Epidemiologic Studies Depression Score or CES-D or Eating Disorders Examination or EDE or Child Eating Disorders Examination or CEDE or Eating Attitudes Test or Child Eating Attitude Test or ChEAT or (Cystic fibrosis eating attitudes and behaviours) or CFEAB).ti,ab.
41	4 and 40
42	((Hospital Anxiety and Depression Scale?) or CFQ-R).ti,ab.
43	4 and 30 and 42

#	Searches
44	exp *MENTAL DISEASE/di [Diagnosis]
45	exp *MENTAL DISEASE/ep [Epidemiology]
46	exp *DEPRESSION/di [Diagnosis]
47	exp *DEPRESSION/ep [Epidemiology]
48	((mental\$ health or depress\$) adj5 (Identif\$ or assess\$ or diagnos\$)).ab,ti.
49	or/44-48
50	4 and 49
51	39 or 41 or 43 or 50
52	limit 51 to english language
53	letter.pt. or LETTER/
54	note.pt.
55	editorial.pt.
56	CASE REPORT/ or CASE STUDY/
57	(letter or comment*).ti.
58	or/53-57
59	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
60	58 not 59
61	ANIMAL/ not HUMAN/
62	NONHUMAN/
63	exp ANIMAL EXPERIMENT/
64	exp EXPERIMENTAL ANIMAL/
65	ANIMAL MODEL/
66	exp RODENT/
67	(rat or rats or mouse or mice).ti.
68	or/60-67
69	52 not 68

E.14.7 Database: PsycINFO

Last searched on **PsycINFO** 1967 to October Week 5 2016 on 8th November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	MENTAL HEALTH/
6	exp MENTAL DISORDERS/
7	EMOTIONAL ADJUSTMENT/
8	(mental\$ adj2 health?).ab,ti.
9	((Mental\$ or Adjust\$ or Anxiety or Obsessive\$ or Compulsive\$ or Panic\$ or Phobi? or Stress\$ or Dissociative or Eating or food or Binge or Factitious or Impuls\$ or Mood\$ or Affective or Neurotic or Personality or Paranoid or Psychotic or Sexual\$ or Gender or Sleep\$ or Somatoform or Body Dysmorphi? or Conversion) adj3 Disorder?).ab,ti.
10	((Substance? or drug? or Alcohol or Tobacco) adj3 (Disorder? or misus\$ or abus\$)).ab,ti.
11	(Agoraphobi\$ or Anorexi\$ or Bulimi\$ or Schizophreni\$ or Dyssomni\$ or Parasomni\$ or Neurastheni\$).ab,ti.

#	Searches
12	((avoid\$ or restrict\$) adj3 food?).ti,ab.
13	"DEPRESSION (EMOTION)"/
14	MAJOR DEPRESSION/
15	depress\$.ab,ti.
16	mood?.ti,ab.
17	ANXIETY/
18	anxiet\$.ti,ab.
19	needle?.ti,ab.
20	TREATMENT COMPLIANCE/
21	TREATMENT REFUSAL/
22	((adhere\$ or nonadher\$ or complia\$ or comply\$ or noncomplia\$ or noncomply\$ or cooperat\$ or co-operat\$) adj3 (patient? or medication? or treat\$)).ti,ab.
23	(refus\$ adj3 treat\$).ti,ab.
24	SCHOOL ATTENDANCE/
25	SCHOOL REFUSAL/
26	(School\$ adj3 (refus\$ or absen\$)).ti,ab.
27	truan\$.ti,ab.
28	or/5-27
29	SCREENING/ or SCREENING TESTS/
30	screen\$.ab,ti.
31	exp QUESTIONNAIRES/
32	(questionnaire? or self report\$).ab,ti.
33	(clinical\$ adj3 assess\$).ti,ab.
34	or/29-33
35	4 and 28 and 34
36	(Generalized Anxiety Disorder 7 or Generalized Anxiety Disorder seven or GAD-7 or Patient Health Questionnaire 2 or Patient Health Questionnaire two or PHQ-2 or Patient Health Questionnaire 9 or Patient Health Questionnaire nine or PHQ-9 or (Hospital Anxiety and Depression Scale?) or HADS or P?ediatric Index of Emotional Distress or PI-ED or Cystic Fibrosis Questionnaire Revised or CFQ-R or Cystic Fibrosis Quality of Life Questionnaire or CFQOL or Centre for Epidemiologic Studies Depression Score or CES-D or Eating Disorders Examination or EDE or Child Eating Disorders Examination or CEDE or Eating Attitudes Test or Child Eating Attitude Test or ChEAT or (Cystic fibrosis eating attitudes and behaviours) or CFEAB).ti,ab.
37	4 and 36
38	PSYCHOLOGICAL ASSESSMENT/
39	PSYCHIATRIC EVALUATION/
40	PSYCHODIAGNOSIS/
41	((mental\$ health or depress\$) adj5 (Identif\$ or assess\$ or diagnos\$)).ab,ti.
42	or/38-41
43	4 and 42
44	35 or 37 or 43
45	limit 44 to english language
46	limit 45 to ("0100 journal" or "0110 peer-reviewed journal" or "0120 non-peer-reviewed journal" or "0130 peer-reviewed status unknown" or "0500 electronic collection")

E.15 Pulmonary monitoring

E.15.1 What is the value of the following investigative strategies in monitoring the onset of pulmonary disease in people with CF without clinical signs or symptoms of lung disease?

- Non-invasive microbiological investigation- induced sputum samples, cough swab, throat swab, and nasopharyngeal aspiration
- Invasive microbiological investigation- bronchoalveolar lavage
- Lung physiological function tests- Cardiopulmonary exercise testing, Spirometry and Lung Clearance Index
- Imaging techniques- Chest x-ray and CT scan

E.15.2 What is the value of the following investigative strategies in monitoring evolving pulmonary disease in people with established lung disease?

- Non-invasive microbiological investigation- induced sputum samples, cough swab, throat swab, and nasopharyngeal aspiration
- Invasive microbiological investigation- bronchoalveolar lavage
- Lung physiological function tests- Cardiopulmonary exercise testing, Spirometry and Lung Clearance Index
- Imaging techniques- Chest x-ray and CT scan
- Evolving pulmonary disease defined as decline in lung function (based on FEV1), increased exacerbations and/or infections, (symptom based?) and CT changes.

E.15.3 What is the added value of imaging and invasive microbiological testing in addition to non-invasive microbiological testing and lung function tests in monitoring the response to treatment following an acute exacerbation?

E.15.3.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to October Week 3 2016 on 2nd November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp *RESPIRATORY TRACT INFECTIONS/
6	exp *BACTERIAL INFECTIONS/
7	exp *PNEUMONIA/
8	exp *STAPHYLOCOCCUS AUREUS/
9	exp *PSEUDOMONAS AERUGINOSA/
10	exp *LUNG/pa, pp [Pathology, Physiopathology]
11	((lung? or pulmonar? or respirat\$ or airway?) adj (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$)).ti.
12	((bacteria\$ or mycobacteria\$) adj infect\$).ti.
13	pneumoni\$.ti.
14	(staphylococcus aureus or s aureus or pseudomonas aeruginosa or p aeruginosa).ti.
15	or/5-14
16	exp "SENSITIVITY AND SPECIFICITY"/

#	Searches
17	(sensitivity or specificity).ti,ab.
18	((pre test or pretest or post test or posttest) adj probability).ti,ab.
19	(predictive value\$ or PPV or NPV).ti,ab.
20	likelihood ratio\$.ti,ab.
21	LIKELIHOOD FUNCTIONS/
22	(ROC curve\$ or AUC).ti,ab.
23	diagnos\$.ti.
24	(diagnos\$ adj2 (performance\$ or accurac\$ or utilit\$ or value\$ or efficien\$ or effectiveness)).ti,ab.
25	gold standard.ab.
26	di.fs.
27	or/16-26
28	*DIAGNOSTIC TECHNIQUES, RESPIRATORY SYSTEM/
29	((lung? or pulmonar? or respirat\$ or airway?) adj3 (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$ or microbiolog\$ or bacteri\$ or pathogen?) adj3 (monitor\$ or investigat\$ or test\$ or assess\$ or measure\$ or exam\$ or cultur\$ or marker? or onset or detect\$ or indicat\$)).ti,ab.
30	or/28-29
31	SPUTUM/
32	((cough or throat or pharyn\$ or oral or oropharyn\$ or sputum or airway?) adj3 (swab? or culture\$ or sampl\$)).ti,ab.
33	(sputum adj1 induc\$.ti,ab.
34	(sputum adj2 analys\$.ti,ab.
35	exp BRONCHOALVEOLAR LAVAGE/
36	BRONCHOSCOPY/
37	((bronch\$ or lung? or pulmonar? or respirat\$) adj3 lavage).ti,ab.
38	(BAL or BALF).ti,ab.
39	(nasopharyn\$ adj3 aspirat\$.ti,ab.
40	exp RESPIRATORY FUNCTION TESTS/
41	BREATH TESTS/
42	EXERCISE TEST/
43	((lung? or pulmonar? or respirat\$ or airway?) adj3 function test?).ti,ab.
44	(lung clearance index\$ or forced expiratory volume? or spiromet\$ or spirogra\$ or broncospiro\$ or cardiopulmonary exercise test?).ti,ab.
45	(LCI or FEV or FEV1 or CPEX or CPX or CPET).ti,ab.
46	exp RADIOGRAPHY, THORACIC/
47	exp RESPIRATORY SYSTEM/ra [Radiography]
48	((chest? or thora\$) adj3 (xray or x ray or radiogra\$)).ti,ab.
49	CXR.ti,ab.
50	exp TOMOGRAPHY, X-RAY COMPUTED/
51	(CT scan\$ or CAT scan\$ or xray CT or x ray CT or HRCT).ti,ab.
52	((xray or x ray or comput\$) adj3 tomogra\$).ti,ab.
53	exp MAGNETIC RESONANCE IMAGING/
54	(MRI or NMRI).ti,ab.
55	((magnetic resonance or MR or MTC or MT or NMR or magneti#ation transfer or spin or chemical shift) adj2 (imag\$ or tomogra\$)).ti,ab.
56	or/31-55

#	Searches
57	4 and 15 and 27 and 56
58	4 and 30 and 56
59	*CYSTIC FIBROSIS/ and exp *RESPIRATORY TRACT INFECTIONS/di, mi, ra [Diagnosis, Microbiology, Radiography]
60	*CYSTIC FIBROSIS/ and exp *BACTERIAL INFECTIONS/di, mi, ra [Diagnosis, Microbiology, Radiography]
61	*CYSTIC FIBROSIS/ and exp *PNEUMONIA/di, mi, ra [Diagnosis, Microbiology, Radiography]
62	or/57-61
63	limit 62 to english language
64	LETTER/
65	EDITORIAL/
66	NEWS/
67	exp HISTORICAL ARTICLE/
68	ANECDOTES AS TOPIC/
69	COMMENT/
70	CASE REPORT/
71	(letter or comment*).ti.
72	or/64-71
73	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
74	72 not 73
75	ANIMALS/ not HUMANS/
76	exp ANIMALS, LABORATORY/
77	exp ANIMAL EXPERIMENTATION/
78	exp MODELS, ANIMAL/
79	exp RODENTIA/
80	(rat or rats or mouse or mice).ti.
81	or/74-80
82	63 not 81

E.15.3.2 Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** October 31, 2016 on 2nd November 2016.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	or/1-2
4	((lung? or pulmonar? or respirat\$ or airway?) adj (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$)).ti.
5	((bacteria\$ or mycobacteria\$) adj infect\$).ti.
6	pneumoni\$.ti.
7	(staphylococcus aureus or s aureus or pseudomonas aeruginosa or p aeruginosa).ti.
8	or/4-7
9	(sensitivity or specificity).ti,ab.
10	((pre test or pretest or post test or posttest) adj probability).ti,ab.
11	(predictive value\$ or PPV or NPV).ti,ab.

#	Searches
12	likelihood ratio\$.ti,ab.
13	(ROC curve\$ or AUC).ti,ab.
14	diagnos\$.ti.
15	(diagnos\$ adj2 (performance\$ or accurac\$ or utilit\$ or value\$ or efficien\$ or effectiveness)).ti,ab.
16	gold standard.ab.
17	or/9-16
18	((lung? or pulmonar? or respirat\$ or airway?) adj3 (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$ or microbiolog\$ or bacteri\$ or pathogen?) adj3 (monitor\$ or investigat\$ or test\$ or assess\$ or measure\$ or exam\$ or cultur\$ or marker? or onset or detect\$ or indicat\$)).ti,ab.
19	((cough or throat or pharyn\$ or oral or oropharyn\$ or sputum or airway?) adj3 (swab? or culture\$ or sampl\$)).ti,ab.
20	(sputum adj1 induc\$).ti,ab.
21	(sputum adj2 analys\$).ti,ab.
22	((bronch\$ or lung? or pulmonar? or respirat\$) adj3 lavage).ti,ab.
23	(BAL or BALF).ti,ab.
24	(nasopharyn\$ adj3 aspirat\$).ti,ab.
25	((lung? or pulmonar? or respirat\$ or airway?) adj3 function test?).ti,ab.
26	(lung clearance index\$ or forced expiratory volume? or spiromet\$ or spirogra\$ or broncospiro\$ or cardiopulmonary exercise test?).ti,ab.
27	(LCI or FEV or FEV1 or CPEX or CPX or CPET).ti,ab.
28	((chest? or thora\$) adj3 (xray or x ray or radiogra\$)).ti,ab.
29	CXR.ti,ab.
30	(CT scan\$ or CAT scan\$ or xray CT or x ray CT or HRCT).ti,ab.
31	((xray or x ray or comput\$) adj3 tomogra\$).ti,ab.
32	(MRI or NMRI).ti,ab.
33	((magnetic resonance or MR or MTC or MT or NMR or magneti#ation transfer or spin or chemical shift) adj2 (imag\$ or tomogra\$)).ti,ab.
34	or/19-33
35	3 and 8 and 17 and 34
36	4 and 18 and 34
37	or/35-36

E.15.3.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** September 2016 on 2nd November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab.
4	or/1-3
5	exp *RESPIRATORY TRACT INFECTIONS/
6	exp *BACTERIAL INFECTIONS/
7	exp *PNEUMONIA/
8	exp *STAPHYLOCOCCUS AUREUS/
9	exp *PSEUDOMONAS AERUGINOSA/

#	Searches
10	exp *LUNG/pa, pp [Pathology, Physiopathology]
11	((lung? or pulmonar? or respirat\$ or airway?) adj2 (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$)).ti,kw.
12	((bacteria\$ or mycobacteria\$) adj infect\$).ti,kw.
13	pneumoni\$.ti.
14	(staphylococcus aureus or s aureus or pseudomonas aeruginosa or p aeruginosa).ti,kw.
15	or/5-14
16	exp "SENSITIVITY AND SPECIFICITY"/
17	(sensitivity or specificity).ti,ab,kw.
18	((pre test or pretest or post test or posttest) adj probability).ti,ab.
19	(predictive value\$ or PPV or NPV).ti,ab.
20	likelihood ratio\$.ti,ab.
21	LIKELIHOOD FUNCTIONS/ or STATISTICAL MODEL.kw.
22	(ROC curve\$ or AUC).ti,ab.
23	diagnos\$.ti.
24	(diagnos\$ adj2 (performance\$ or accurac\$ or utilit\$ or value\$ or efficien\$ or effectiveness)).ti,ab,kw.
25	gold standard.ab.
26	di.fs.
27	or/16-26
28	*DIAGNOSTIC TECHNIQUES, RESPIRATORY SYSTEM/ or RESPIRATORY TRACT EXAMINATION.kw.
29	((lung? or pulmonar? or respirat\$ or airway?) adj3 (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$ or microbiolog\$ or bacteri\$ or pathogen?) adj3 (monitor\$ or investigat\$ or test\$ or assess\$ or measure\$ or exam\$ or cultur\$ or marker? or onset or detect\$ or indicat\$)).ti,ab.
30	or/28-29
31	SPUTUM/ or SPUTUM EXAMINATION.kw.
32	((cough or throat or pharyn\$ or oral or oropharyn\$ or sputum or airway?) adj3 (swab? or culture\$ or sampl\$)).ti,ab,kw.
33	(sputum adj1 induc\$).ti,ab.
34	(sputum adj2 analys\$).ti,ab,kw.
35	exp BRONCHOALVEOLAR LAVAGE/
36	BRONCHOSCOPY/ or RESPIRATORY TRACT ASPIRATION PROCEDURE.kw.
37	((bronch\$ or lung? or pulmonar? or respirat\$) adj3 lavage).ti,ab,kw.
38	(BAL or BALF).ti,ab.
39	(nasopharyn\$ adj3 aspirat\$).ti,ab.
40	exp RESPIRATORY FUNCTION TESTS/ or RESPIRATORY TRACT PARAMETERS.kw.
41	BREATH TESTS/ or BREATH ANALYSIS.kw.
42	EXERCISE TEST/
43	((lung? or pulmonar? or respirat\$ or airway?) adj3 function test?).ti,ab,kw.
44	(lung clearance index\$ or forced expiratory volume? or spiromet\$ or spirogra\$ or broncospiro\$ or cardiopulmonary exercise test?).ti,ab,kw.
45	(LCI or FEV or FEV1 or CPEX or CPX or CPET).ti,ab.
46	exp RADIOGRAPHY, THORACIC/
47	exp RESPIRATORY SYSTEM/ra [Radiography]
48	((chest? or thora\$) adj3 (xray or x ray or radiogra\$)).ti,ab,kw.

#	Searches
49	CXR.ti,ab.
50	exp TOMOGRAPHY, X-RAY COMPUTED/
51	(CT scan\$ or CAT scan\$ or xray CT or x ray CT or HRCT).ti,ab.
52	((xray or x ray or comput\$) adj3 tomogra\$).ti,ab,kw.
53	exp MAGNETIC RESONANCE IMAGING/
54	(MRI or NMRI).ti,ab.
55	((magnetic resonance or MR or MTC or MT or NMR or magneti#ation transfer or spin or chemical shift) adj2 (imag\$ or tomogra\$)).ti,ab,kw.
56	or/31-55
57	4 and 15 and 27 and 56
58	4 and 30 and 56
59	CYSTIC FIBROSIS/ and exp RESPIRATORY TRACT INFECTIONS/di, mi, ra [Diagnosis, Microbiology, Radiography]
60	CYSTIC FIBROSIS/ and exp BACTERIAL INFECTIONS/di, mi, ra [Diagnosis, Microbiology, Radiography]
61	CYSTIC FIBROSIS/ and exp PNEUMONIA/di, mi, ra [Diagnosis, Microbiology, Radiography]
62	or/57-61

E.15.3.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to October 26, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 2nd November 2016.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw,tx.
3	mucov\$.tw,tx.
4	or/1-3
5	RESPIRATORY TRACT INFECTIONS.kw.
6	BACTERIAL INFECTIONS.kw.
7	PNEUMONIA.kw.
8	STAPHYLOCOCCUS AUREUS.kw.
9	PSEUDOMONAS AERUGINOSA.kw.
10	LUNG?.kw.
11	((lung? or pulmonar? or respirat\$ or airway?) adj (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$)).ti.
12	((bacteria\$ or mycobacteria\$) adj infect\$).ti.
13	pneumoni\$.ti.
14	(staphylococcus aureus or s aureus or pseudomonas aeruginosa or p aeruginosa).ti.
15	or/5-14
16	"SENSITIVITY AND SPECIFICITY".kw.
17	(sensitivity or specificity).tw,tx.
18	((pre test or pretest or post test or posttest) adj probability).tw,tx.
19	(predictive value\$ or PPV or NPV).tw,tx.
20	likelihood ratio\$.tw,tx.
21	LIKELIHOOD FUNCTIONS.kw.

#	Searches
22	(ROC curve\$ or AUC).tw,tx.
23	diagnos\$.ti.
24	(diagnos\$ adj2 (performance\$ or accurac\$ or utilit\$ or value\$ or efficien\$ or effectiveness)).tw,tx.
25	gold standard.tw,tx.
26	or/16-25
27	DIAGNOSTIC TECHNIQUES, RESPIRATORY SYSTEM.kw.
28	((lung? or pulmonar? or respirat\$ or airway?) adj3 (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$ or microbiolog\$ or bacteri\$ or pathogen?) adj3 (monitor\$ or investigat\$ or test\$ or assess\$ or measure\$ or exam\$ or cultur\$ or marker? or onset or detect\$ or indicat\$)).tw,tx.
29	or/27-28
30	SPUTUM.kw.
31	((cough or throat or pharyn\$ or oral or oropharyn\$ or sputum or airway?) adj3 (swab? or culture\$ or sampl\$)).tw,tx.
32	(sputum adj1 induc\$).tw,tx.
33	(sputum adj2 analys\$).tw,tx.
34	BRONCHOALVEOLAR LAVAGE.kw.
35	BRONCHOSCOPY.kw.
36	((bronch\$ or lung? or pulmonar? or respirat\$) adj3 lavage).tw,tx.
37	(BAL or BALF).tw,tx.
38	(nasopharyn\$ adj3 aspirat\$).tw,tx.
39	RESPIRATORY FUNCTION TESTS.kw.
40	BREATH TESTS.kw.
41	EXERCISE TEST.kw.
42	((lung? or pulmonar? or respirat\$ or airway?) adj3 function test?).tw,tx.
43	(lung clearance index\$ or forced expiratory volume? or spiromet\$ or spirogra\$ or broncospiro\$ or cardiopulmonary exercise test?).tw,tx.
44	(LCI or FEV or FEV1 or CPEX or CPX or CPET).tw,tx.
45	RADIOGRAPHY, THORACIC.kw.
46	((chest? or thora\$) adj3 (xray or x ray or radiogra\$)).tw,tx.
47	CXR.tw,tx.
48	TOMOGRAPHY, X-RAY COMPUTED.kw.
49	(CT scan\$ or CAT scan\$ or xray CT or x ray CT or HRCT).tw,tx.
50	((xray or x ray or comput\$) adj3 tomogra\$).tw,tx.
51	MAGNETIC RESONANCE IMAGING.kw.
52	(MRI or NMRI).tw,tx.
53	((magnetic resonance or MR or MTC or MT or NMR or magneti#ation transfer or spin or chemical shift) adj2 (imag\$ or tomogra\$)).tw,tx.
54	or/30-53
55	4 and 15 and 26 and 54
56	4 and 29 and 54
57	or/55-56

E.15.3.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 3rd Quarter 2016** on 2nd November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	exp *RESPIRATORY TRACT INFECTIONS/
6	exp *BACTERIAL INFECTIONS/
7	exp *PNEUMONIA/
8	exp *STAPHYLOCOCCUS AUREUS/
9	exp *PSEUDOMONAS AERUGINOSA/
10	exp *LUNG/pa, pp [Pathology, Physiopathology]
11	((lung? or pulmonar? or respirat\$ or airway?) adj (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$)).ti.
12	((bacteria\$ or mycobacteria\$) adj infect\$).ti.
13	pneumoni\$.ti.
14	(staphylococcus aureus or s aureus or pseudomonas aeruginosa or p aeruginosa).ti.
15	or/5-14
16	exp "SENSITIVITY AND SPECIFICITY"/
17	(sensitivity or specificity).tw.
18	((pre test or pretest or post test or posttest) adj probability).tw.
19	(predictive value\$ or PPV or NPV).tw.
20	likelihood ratio\$.tw.
21	LIKELIHOOD FUNCTIONS/
22	(ROC curve\$ or AUC).tw.
23	diagnos\$.tw.
24	(diagnos\$ adj2 (performance\$ or accurac\$ or utilit\$ or value\$ or efficien\$ or effectiveness)).tw.
25	gold standard.tw.
26	di.fs.
27	or/16-26
28	*DIAGNOSTIC TECHNIQUES, RESPIRATORY SYSTEM/
29	((lung? or pulmonar? or respirat\$ or airway?) adj3 (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$ or microbiolog\$ or bacteri\$ or pathogen?) adj3 (monitor\$ or investigat\$ or test\$ or assess\$ or measure\$ or exam\$ or cultur\$ or marker? or onset or detect\$ or indicat\$)).tw.
30	or/28-29
31	SPUTUM/
32	((cough or throat or pharyn\$ or oral or oropharyn\$ or sputum or airway?) adj3 (swab? or culture\$ or sampl\$)).tw.
33	(sputum adj1 induc\$).tw.
34	(sputum adj2 analys\$).tw.
35	exp BRONCHOALVEOLAR LAVAGE/
36	BRONCHOSCOPY/
37	((bronch\$ or lung? or pulmonar? or respirat\$) adj3 lavage).tw.
38	(BAL or BALF).tw.
39	(nasopharyn\$ adj3 aspirat\$).tw.
40	exp RESPIRATORY FUNCTION TESTS/
41	BREATH TESTS/

#	Searches
42	EXERCISE TEST/
43	((lung? or pulmonar? or respirat\$ or airway?) adj3 function test?).tw.
44	(lung clearance index\$ or forced expiratory volume? or spiromet\$ or spirogra\$ or broncospiro\$ or cardiopulmonary exercise test?).tw.
45	(LCI or FEV or FEV1 or CPEX or CPX or CPET).tw.
46	exp RADIOGRAPHY, THORACIC/
47	exp RESPIRATORY SYSTEM/ra [Radiography]
48	((chest? or thora\$) adj3 (xray or x ray or radiogra\$)).tw.
49	CXR.tw.
50	exp TOMOGRAPHY, X-RAY COMPUTED/
51	(CT scan\$ or CAT scan\$ or xray CT or x ray CT or HRCT).tw.
52	((xray or x ray or comput\$) adj3 tomogra\$).tw.
53	exp MAGNETIC RESONANCE IMAGING/
54	(MRI or NMRI).tw.
55	((magnetic resonance or MR or MTC or MT or NMR or magneti#ation transfer or spin or chemical shift) adj2 (imag\$ or tomogra\$)).tw.
56	or/31-55
57	4 and 15 and 27 and 56
58	4 and 30 and 56

E.15.3.6 Database: Embase

Last searched on **Embase** 1974 to 2016 Week 44 on 2nd November 2016.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp *LUNG DISEASE/
6	exp *RESPIRATORY TRACT INFLAMMATION/
7	exp *RESPIRATORY TRACT INFECTION/
8	exp *BACTERIAL INFECTION/
9	exp *STAPHYLOCOCCUS AUREUS/
10	exp *PSEUDOMONAS AERUGINOSA/
11	((lung? or pulmonar? or respirat\$ or airway?) adj (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$)).ti.
12	((bacteri\$ or mycobacteria\$) adj infect\$).ti.
13	pneumoni\$.ti.
14	(staphylococcus aureus or s aureus or pseudomonas aeruginosa or p aeruginosa).ti.
15	or/5-14
16	"SENSITIVITY AND SPECIFICITY"/
17	(sensitivity or specificity).ti,ab.
18	((pre test or pretest or post test or posttest) adj probability).ti,ab.
19	(predictive value\$ or PPV or NPV).ti,ab.
20	likelihood ratio\$.ti,ab.
21	STATISTICAL MODEL/
22	(ROC curve\$ or AUC).ti,ab.

#	Searches
23	diagnos\$.ti.
24	(diagnos\$ adj2 (performance\$ or accurac\$ or utilit\$ or value\$ or efficien\$ or effectiveness)).ti,ab.
25	gold standard.ab.
26	*DIAGNOSTIC ACCURACY/ or DIAGNOSTIC TEST ACCURACY STUDY/
27	di.fs.
28	or/16-27
29	*RESPIRATORY TRACT EXAMINATION/
30	((lung? or pulmonar? or respirat\$ or airway?) adj3 (disease? or dysfunction\$ or obstruct\$ or inflam\$ or infect\$ or pathol\$ or microbiolog\$ or bacteri\$ or pathogen?) adj3 (monitor\$ or investigat\$ or test\$ or assess\$ or measure\$ or exam\$ or cultur\$ or marker? or onset or detect\$ or indicat\$)).ti,ab.
31	or/29-30
32	exp SPUTUM EXAMINATION/
33	((cough or throat or pharyn\$ or oral or oropharyn\$ or sputum or airway?) adj3 (swab? or culture\$ or sampl\$)).ti,ab.
34	(sputum adj1 induc\$.ti,ab.
35	(sputum adj2 analys\$.ti,ab.
36	LUNG LAVAGE/
37	exp RESPIRATORY TRACT ASPIRATION PROCEDURE/
38	((bronch\$ or lung? or pulmonar? or respirat\$) adj3 lavage).ti,ab.
39	(BAL or BALF).ti,ab.
40	(nasopharyn\$ adj3 aspirat\$.ti,ab.
41	exp LUNG FUNCTION TEST/
42	exp RESPIRATORY TRACT PARAMETERS/
43	exp BREATH ANALYSIS/
44	((lung? or pulmonar? or respirat\$ or airway?) adj3 function test?).ti,ab.
45	(lung clearance index\$ or forced expiratory volume? or spiromet\$ or spirogra\$ or broncospiro\$ or cardiopulmonary exercise test?).ti,ab.
46	(LCI or FEV or FEV1 or CPEX or CPX or CPET).ti,ab.
47	THORAX RADIOGRAPHY/
48	((chest? or thora\$) adj3 (xray or x ray or radiogra\$)).ti,ab.
49	CXR.ti,ab.
50	exp COMPUTER ASSISTED TOMOGRAPHY/
51	(CT scan\$ or CAT scan\$ or xray CT or x ray CT or HRCT).ti,ab.
52	((xray or x ray or comput\$) adj3 tomogra\$).ti,ab.
53	exp NUCLEAR MAGNETIC RESONANCE IMAGING/
54	(MRI or NMRI).ti,ab.
55	((magnetic resonance or MR or MTC or MT or NMR or magneti#ation transfer or spin or chemical shift) adj2 (imag\$ or tomogra\$)).ti,ab.
56	or/32-55
57	and/4,15,28,56
58	and/4,31,56
59	*CYSTIC FIBROSIS/ and exp *LUNG DISEASE/di [Diagnosis]
60	*CYSTIC FIBROSIS/ and exp *RESPIRATORY TRACT INFLAMMATION/di [Diagnosis]
61	*CYSTIC FIBROSIS/ and exp *RESPIRATORY TRACT INFECTION/di [Diagnosis]
62	*CYSTIC FIBROSIS/ and exp *BACTERIAL INFECTION/di [Diagnosis]

#	Searches
63	or/57-62
64	limit 63 to english language
65	letter.pt. or LETTER/
66	note.pt.
67	editorial.pt.
68	CASE REPORT/ or CASE STUDY/
69	(letter or comment*).ti.
70	or/65-69
71	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
72	70 not 71
73	ANIMAL/ not HUMAN/
74	NONHUMAN/
75	exp ANIMAL EXPERIMENT/
76	exp EXPERIMENTAL ANIMAL/
77	ANIMAL MODEL/
78	exp RODENT/
79	(rat or rats or mouse or mice).ti.
80	or/72-79
81	64 not 80

E.16 What is the effectiveness of airway clearance techniques [chest physiotherapy] in people with cystic fibrosis?

E.16.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	META-ANALYSIS/
2	META-ANALYSIS AS TOPIC/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic* or evidence*) adj2 (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 psychlit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
9	cochrane.jw.
10	or/1-9
11	randomized controlled trial.pt.
12	controlled clinical trial.pt.
13	pragmatic clinical trial.pt.
14	randomi#ed.ab.
15	placebo.ab.
16	randomly.ab.

#	Searches
17	CLINICAL TRIALS AS TOPIC/
18	trial.ti.
19	or/11-18
20	or/10,19
21	CYSTIC FIBROSIS/
22	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
23	mucov\$.ti,ab.
24	or/21-23
25	exp PHYSICAL THERAPY MODALITIES/ or exp AIRWAY MANAGEMENT/ or exp AIRWAY OBSTRUCTION/th [Therapy]
26	((physiotherap\$ or physical therap\$ or massage therap\$) adj3 (chest\$ or thora\$)).ti,ab.
27	((mucoc\$ or mucus or airway\$) adj3 clear\$).ti,ab.
28	exp DRAINAGE, POSTURAL/
29	exp PERCUSSION/
30	exp COUGH/
31	(chest adj3 (shak\$ or percussion or clap\$)).ti,ab.
32	(huff\$ or percussion or cough\$).ti,ab.
33	(postur\$ adj2 drain\$).ti,ab.
34	exp POSITIVE-PRESSURE RESPIRATION/
35	(positive expiratory pressure or PEP or hPEP).ti,ab.
36	exp RESPIRATORY THERAPY/ or exp BREATHING EXERCISES/
37	(forced adj2 expirat\$ adj2 technique\$).ti,ab.
38	(ACBT or FET or clap\$).ti,ab.
39	((breath\$ or thora\$ or relax\$ or respirat\$ or inhal\$) adj3 (exercis\$ or technique\$ or control\$ or therap\$)).ti,ab.
40	autogenic drainage.ti,ab.
41	exp CHEST WALL OSCILLATION/ or exp HIGH-FREQUENCY VENTILATION/ or exp MUCOCILIARY CLEARANCE/
42	(oscillat\$ or vest\$ or HFCWO or acapella or flutter or cornet).ti,ab.
43	exp NONINVASIVE VENTILATION/
44	((non-invasive or noninvasive) adj2 ventilat\$).ti,ab.
45	or/25-44
46	and/20,24,45
47	limit 46 to english language
48	LETTER/
49	EDITORIAL/
50	NEWS/
51	exp HISTORICAL ARTICLE/
52	ANECDOTES AS TOPIC/
53	COMMENT/
54	CASE REPORT/
55	(letter or comment*).ti.
56	or/48-55
57	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
58	56 not 57
59	ANIMALS/ not HUMANS/

#	Searches
60	exp ANIMALS, LABORATORY/
61	exp ANIMAL EXPERIMENTATION/
62	exp MODELS, ANIMAL/
63	exp RODENTIA/
64	(rat or rats or mouse or mice).ti.
65	or/58-64
66	47 not 65

E.16.2 Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	1 or 2
4	((physiotherap\$ or physical therap\$ or massage therap\$) adj3 (chest\$ or thora\$)).ti,ab.
5	((mucoc\$ or mucus or airway\$) adj3 clear\$).ti,ab.
6	(chest adj3 (shak\$ or percussion or clap\$)).ti,ab.
7	(huff\$ or percussion or cough\$).ti,ab.
8	(postur\$ adj2 drain\$).ti,ab.
9	(positive expiratory pressure or PEP or hPEP).ti,ab.
10	(forced adj2 expirat\$ adj2 technique\$).ti,ab.
11	(ACBT or FET or clap\$).ti,ab.
12	((breath\$ or thora\$ or relax\$ or respirat\$ or inhal\$) adj3 (exercis\$ or technique\$ or control\$ or therap\$)).ti,ab.
13	autogenic drainage.ti,ab.
14	(oscillat\$ or vest\$ or HFCWO or acapella or flutter or cornet).ti,ab.
15	((non-invasive or noninvasive) adj2 ventilat\$).ti,ab.
16	or/4-15
17	3 and 16
18	limit 17 to english language

E.16.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** November 2016 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab.
4	or/1-3
5	PHYSICAL THERAPY MODALITIES/ or AIRWAY MANAGEMENT/
6	(PHYSIOTHERAPY or BREATHING EXERCISE or LUNG CLEARANCE).kw.
7	exp AIRWAY OBSTRUCTION/th [Therapy]
8	((physiotherap\$ or physical therap\$ or massage therap\$) adj3 (chest\$ or thora\$)).ti,ab.
9	((mucoc\$ or mucus or airway\$) adj3 clear\$).ti,ab.

#	Searches
10	DRAINAGE, POSTURAL/ or POSTURAL DRAINAGE.kw.
11	PERCUSSION.sh,kw.
12	COUGH/ or COUGHING.kw.
13	(chest adj3 (shak\$ or percussion or clap\$)).ti,ab.
14	(huff\$ or percussion or cough\$).ti,ab.
15	(postur\$ adj2 drain\$).ti,ab.
16	POSITIVE-PRESSURE RESPIRATION/ or POSITIVE END EXPIRATORY PRESSURE.kw.
17	(positive expiratory pressure or PEP or hPEP).ti,ab.
18	RESPIRATORY THERAPY/ or BREATHING EXERCISES/
19	(RESPIRATION CONTROL or RELAXATION TRAINING).kw.
20	FORCED EXPIRATION.kw.
21	(forced adj2 expirat\$ adj2 technique\$).ti,ab.
22	(ACBT or FET or clap\$).ti,ab.
23	((breath\$ or thora\$ or relax\$ or respirat\$ or inhal\$) adj3 (exercis\$ or technique\$ or control\$ or therap\$)).ti,ab.
24	autogenic drainage.ti,ab.
25	CHEST WALL OSCILLATION/ or HIGH-FREQUENCY VENTILATION/ or MUCOCILIARY CLEARANCE/
26	(OSCILLATION or CHEST WALL OSCILLATION or HIGH FREQUENCY VENTILATION).kw.
27	(oscillat\$ or vest\$ or HFCWO or acapella or flutter or cornet).ti,ab.
28	NONINVASIVE VENTILATION.sh,kw.
29	((non-invasive or noninvasive) adj2 ventilat\$).ti,ab.
30	or/5-29
31	4 and 30

E.16.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to December 30, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,tw,tx.
3	mucov\$.ti,tw,tx.
4	or/1-3
5	(PHYSICAL THERAPY MODALITIES or PHYSIOTHERAPY or BREATHING EXERCISE or AIRWAY MANAGEMENT or AIRWAY OBSTRUCTION or LUNG CLEARANCE).kw.
6	((physiotherap\$ or physical therap\$ or massage therap\$) adj3 (chest\$ or thora\$)).ti,tw,tx.
7	((mucoc\$ or mucus or airway\$) adj3 clear\$).ti,tw,tx.
8	(DRAINAGE, POSTURAL or POSTURAL DRAINAGE or PERCUSSION or COUGH or COUGHING).kw.
9	(chest adj3 (shak\$ or percussion or clap\$)).ti,tw,tx.
10	(huff\$ or percussion or cough\$).ti,tw,tx.
11	(postur\$ adj2 drain\$).ti,tw,tx.
12	(POSITIVE-PRESSURE RESPIRATION or POSITIVE END EXPIRATORY

#	Searches
	PRESSURE).kw.
13	(positive expiratory pressure or PEP or hPEP).ti,tw,tx.
14	(RESPIRATORY THERAPY or BREATHING EXERCISES or RESPIRATION CONTROL or RELAXATION TRAINING or FORCED EXPIRATION).kw.
15	(forced adj2 expirat\$ adj2 technique\$).ti,tw,tx.
16	(ACBT or FET or clap\$).ti,tw,tx.
17	((breath\$ or thora\$ or relax\$ or respirat\$ or inhal\$) adj3 (exercis\$ or technique\$ or control\$ or therap\$)).ti,tw,tx.
18	autogenic drainage.ti,tw,tx.
19	(CHEST WALL OSCILLATION or HIGH-FREQUENCY VENTILATION or HIGH FREQUENCY VENTILATION or MUCOCILIARY CLEARANCE or OSCILLATION).kw.
20	(oscillat\$ or vest\$ or HFCWO or acapella or flutter or cornet).ti,tw,tx.
21	NONINVASIVE VENTILATION.kw.
22	((non-invasive or noninvasive) adj2 ventilat\$).ti,tw,tx.
23	or/5-22
24	4 and 23

E.16.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,tw.
3	mucov\$.ti,tw.
4	or/1-3
5	exp PHYSICAL THERAPY MODALITIES/ or exp AIRWAY OBSTRUCTION/th [Therapy]
6	((physiotherap\$ or physical therap\$ or massage therap\$) adj3 (chest\$ or thora\$)).ti,tw.
7	((mucoc\$ or mucus or airway\$) adj3 clear\$).ti,tw.
8	exp DRAINAGE, POSTURAL/
9	exp PERCUSSION/
10	exp COUGH/
11	(chest adj3 (shak\$ or percussion or clap\$)).ti,tw.
12	(huff\$ or percussion or cough\$).ti,tw.
13	(postur\$ adj2 drain\$).ti,tw.
14	exp POSITIVE-PRESSURE RESPIRATION/
15	(positive expiratory pressure or PEP or hPEP).ti,tw.
16	exp RESPIRATORY THERAPY/ or exp BREATHING EXERCISES/
17	(forced adj2 expirat\$ adj2 technique\$).ti,tw.
18	(ACBT or FET or clap\$).ti,tw.
19	((breath\$ or thora\$ or relax\$ or respirat\$ or inhal\$) adj3 (exercis\$ or technique\$ or control\$ or therap\$)).ti,tw.
20	autogenic drainage.ti,tw.
21	exp CHEST WALL OSCILLATION/ or exp HIGH-FREQUENCY VENTILATION/ or exp MUCOCILIARY CLEARANCE/
22	(oscillat\$ or vest\$ or HFCWO or acapella or flutter or cornet).ti,tw.
23	exp RESPIRATORY INSUFFICIENCY/

#	Searches
24	((non-invasive or noninvasive) adj2 ventilat\$).ti,tw.
25	or/5-23
26	4 and 25

E.16.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January.

#	Searches
1	SYSTEMATIC REVIEW/
2	META-ANALYSIS/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic or evidence) adj2 (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
12	random*.ti,ab.
13	factorial*.ti,ab.
14	(crossover* or cross over*).ti,ab.
15	((doubl* or singl*) adj blind*).ti,ab.
16	(assign* or allocat* or volunteer* or placebo*).ti,ab.
17	CROSSOVER PROCEDURE/
18	SINGLE BLIND PROCEDURE/
19	RANDOMIZED CONTROLLED TRIAL/
20	DOUBLE BLIND PROCEDURE/
21	or/12-20
22	or/11,21
23	exp CYSTIC FIBROSIS/
24	mucov\$.ti,ab.
25	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
26	or/23-25
27	exp PHYSIOTHERAPY/ or exp LUNG CLEARANCE/
28	exp BREATHING EXERCISE/
29	((physiotherap\$ or physical therap\$ or massage therap\$) adj3 (chest\$ or thora\$)).ti,ab.
30	((mucoc\$ or mucus or airway\$) adj3 clear\$).ti,ab.
31	exp POSTURAL DRAINAGE/
32	exp PERCUSSION/
33	exp COUGHING/
34	(chest adj3 (shak\$ or percussion or clap\$)).ti,ab.
35	(huff\$ or percussion or cough\$).ti,ab.
36	(postur\$ adj2 drain\$).ti,ab.

#	Searches
37	exp POSITIVE END EXPIRATORY PRESSURE/
38	exp RESPIRATION CONTROL/ or exp RELAXATION TRAINING/
39	exp FORCED EXPIRATION/
40	(positive expiratory pressure or PEP or hPEP).ti,ab.
41	(forced adj2 expirat\$ adj2 technique\$).ti,ab.
42	(ACBT or FET or clap\$).ti,ab.
43	((breath\$ or thora\$ or relax\$ or respirat\$ or inhal\$) adj3 (exercis\$ or technique\$ or control\$ or therap\$)).ti,ab.
44	autogenic drainage.ti,ab.
45	exp OSCILLATION/ or exp CHEST WALL OSCILLATION/
46	exp HIGH FREQUENCY VENTILATION/
47	(oscillat\$ or vest\$ or HFCWO or acapella or flutter or cornet).ti,ab.
48	exp NONINVASIVE VENTILATION/
49	((non-invasive or noninvasive) adj2 ventilat\$).ti,ab.
50	or/27-49
51	and/22,26,50
52	limit 51 to english language
53	letter.pt. or LETTER/
54	note.pt.
55	editorial.pt.
56	CASE REPORT/ or CASE STUDY/
57	(letter or comment*).ti.
58	or/53-57
59	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
60	58 not 59
61	ANIMAL/ not HUMAN/
62	NONHUMAN/
63	exp ANIMAL EXPERIMENT/
64	exp EXPERIMENTAL ANIMAL/
65	ANIMAL MODEL/
66	exp RODENT/
67	(rat or rats or mouse or mice).ti.
68	or/60-67
69	52 not 68

E.16.7 Database: PEDro

Last searched on PEDro 11th January 2017.

#	Searches
1	In Title and Abstract box – cystic fibrosis
2	In Therapy box – selected respiratory therapy
3	In Body Part box – selected chest
5	Chose - Match all search terms (AND)
6	Did not limit by year, method or score. Imported all results.
7	In Title and Abstract box – cystic fibrosis

E.16.8 Database: CINAHL

Last searched on CINAHL 1981 to present on 11th January 2017.

#	Query
S39	S5 and S38
S38	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 or S28 or S29 or S30 or S31 or S32 or S33 or S34 or S35 or S36 or S37
S37	AB ((non-invasive or noninvasive) N2 ventilat*)
S36	TI ((non-invasive or noninvasive) N2 ventilat*)
S35	MH NONINVASIVE PROCEDURES
S34	AB (oscillat* or vest* or HFCWO or acapella or flutter or cornet)
S33	TI (oscillat* or vest* or HFCWO or acapella or flutter or cornet)
S32	MH MUCOCILIARY CLEARANCE
S31	MH VENTILATION, HIGH FREQUENCY
S30	MH CHEST PHYSICAL THERAPY
S29	TI autogenic drainage or((mucoc* or mucus or airway*) N3 clear*) OR AB autogenic drainage or((mucoc* or mucus or airway*) N3 clear*)
S28	AB ((breath* or thora* or relax* or respirat* or inhal*) N3 (exercis* or technique* or control* or therap*))
S27	TI ((breath* or thora* or relax* or respirat* or inhal*) N3 (exercis* or technique* or control* or therap*))
S26	AB (ACBT or FET or clap*)
S25	TI (ACBT or FET or clap*)
S24	AB (forced N2 expirat* N2 technique*)
S23	TI (forced N2 expirat* N2 technique*)
S22	MH BREATHING EXERCISES
S21	MH RESPIRATORY THERAPY
S20	AB (positive expiratory pressure or PEP or hPEP)
S19	TI (positive expiratory pressure or PEP or hPEP)
S18	MH POSITIVE PRESSURE VENTILATION
S17	AB (postur* N2 drain*)
S16	TI (postur* N2 drain*)
S15	AB (huff* or percussion or cough*)
S14	TI (huff* or percussion or cough*)
S13	AB (chest N3 (shak* or percussion or clap*))
S12	TI (chest N3 (shak* or percussion or clap*))
S11	MH COUGH
S10	MH PERCUSSION
S9	MH DRAINAGE, POSTURAL
S8	AB ((physiotherap* or physical therap* or massage therap*) N3 (chest* or thora*))
S7	TI ((physiotherap* or physical therap* or massage therap*) N3 (chest* or thora*))
S6	MH (PHYSICAL THERAPY or AIRWAY MANAGEMENT or AIRWAY OBSTRUCTION+/TH)
S5	S1 or S2 or S3 or S4
S4	TI mucov* OR AB mucov*
S3	AB ((cystic or pancrea*) N2 (fibrosis or fibrocystic))
S2	TI ((cystic or pancrea*) N2 (fibrosis or fibrocystic))

#	Query
S1	MH CYSTIC FIBROSIS

E.16.9 Database: AMED

Last searched on AMED 1985 to December 2016 on 11th January 2017.

#	Searches
1	cystic fibrosis/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp physical therapy modalities/
6	airway obstruction/
7	((physiotherap\$ or physical therap\$ or massage therap\$) adj3 (chest\$ or thora\$)).ti,ab.
8	((mucoc\$ or mucus or airway\$) adj3 clear\$).ti,ab.
9	drainage postural/
10	cough/
11	(chest adj3 (shak\$ or percussion or clap\$)).ti,ab.
12	(huff\$ or percussion or cough\$).ti,ab.
13	(postur\$ adj2 drain\$).ti,ab.
14	exp positive pressure respiration/
15	(positive expiratory pressure or PEP or hPEP).ti,ab.
16	exp respiratory therapy/
17	exp breathing exercises/
18	(forced adj2 expirat\$ adj2 technique\$).ti,ab.
19	(ACBT or FET or clap\$).ti,ab.
20	((breath\$ or thora\$ or relax\$ or respirat\$ or inhal\$) adj3 (exercis\$ or technique\$ or control\$ or therap\$)).ti,ab.
21	autogenic drainage.ti,ab.
22	mucociliary clearance/
23	(oscillat\$ or vest\$ or HFCWO or acapella or flutter or cornet).ti,ab.
24	((non-invasive or noninvasive) adj2 ventilat\$).ti,ab.
25	or/5-24
26	4 and 25
27	limit 26 to english language

E.17 What is the effectiveness of mucoactive or mucolytic agents, including rhDNase, nebulised saline (isotonic and hypertonic) and mannitol?

E.17.1 Database: Medline

Last searched on Ovid MEDLINE(R) 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	META-ANALYSIS/
2	META-ANALYSIS AS TOPIC/

#	Searches
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic* or evidence*) adj2 (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
11	randomized controlled trial.pt.
12	controlled clinical trial.pt.
13	pragmatic clinical trial.pt.
14	randomi#ed.ab.
15	placebo.ab.
16	randomly.ab.
17	CLINICAL TRIALS AS TOPIC/
18	trial.ti.
19	or/11-18
20	or/10,19
21	CYSTIC FIBROSIS/
22	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
23	mucov\$.ti,ab.
24	or/21-23
25	exp EXPECTORANTS/
26	ACETYLCYSTEINE/
27	CARBOCYSTEINE/
28	DEOXYRIBONUCLEASE I/
29	SALINE SOLUTION, HYPERTONIC/
30	SODIUM CHLORIDE/
31	ISOTONIC SOLUTIONS/
32	exp MANNITOL/
33	(mucoactive? or mucolytic? or expectorant? or mucokinetic? or mucoregulator? or thiol?).mp.
34	(acetyl#steine or nacetyl#steine or carboc#steine or dornase alfa or rhDNase or recombinant human deoxyribonuclease or recombinant human DNase or saline or sodium chloride or mannitol).mp.
35	or/25-34
36	and/24,35
37	limit 36 to english language
38	LETTER/
39	EDITORIAL/
40	NEWS/
41	exp HISTORICAL ARTICLE/
42	ANECDOTES AS TOPIC/
43	COMMENT/

#	Searches
44	CASE REPORT/
45	(letter or comment*).ti.
46	or/38-45
47	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
48	46 not 47
49	ANIMALS/ not HUMANS/
50	exp ANIMALS, LABORATORY/
51	exp ANIMAL EXPERIMENTATION/
52	exp MODELS, ANIMAL/
53	exp RODENTIA/
54	(rat or rats or mouse or mice).ti.
55	or/48-54
56	37 not 55
57	and/20,56

E.17.2 Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	or/1-2
4	(mucoactive? or mucolytic? or expectorant? or mucokinetic? or mucoregulator? or thiol?).mp.
5	(acetylc#steine or nacetylc#steine or carboc#steine or dornase alfa or rhDNase or recombinant human deoxyribonuclease or recombinant human DNase or saline or sodium chloride or mannitol).mp.
6	or/4-5
7	and/3,6

E.17.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** November 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab.
4	or/1-3
5	exp EXPECTORANTS/
6	ACETYLCYSTEINE/
7	CARBOCYSTEINE/
8	DEOXYRIBONUCLEASE I/
9	SALINE SOLUTION, HYPERTONIC/
10	SODIUM CHLORIDE/
11	ISOTONIC SOLUTIONS/
12	exp MANNITOL/

#	Searches
13	(mucoactive? or mucolytic? or expectorant? or mucokinetic? or mucoregulator? or thiol?).mp.
14	(acetyl#steine or nacetyl#steine or carboc#steine or dornase alfa or rhDNase or recombinant human deoxyribonuclease or recombinant human DNase or saline or sodium chloride or mannitol).mp.
15	or/5-14
16	and/4,15

E.17.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to January 05, 2017, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 10th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw,tx,kw.
2	mucov\$.tw,tx.
3	or/1-2
4	(mucoactive? or mucolytic? or expectorant? or mucokinetic? or mucoregulator? or thiol?).mp.
5	(acetyl#steine or nacetyl#steine or carboc#steine or dornase alfa or rhDNase or recombinant human deoxyribonuclease or recombinant human DNase or saline or sodium chloride or mannitol).mp.
6	or/4-5
7	and/3,6

E.17.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment** 4th Quarter 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	exp EXPECTORANTS/
6	ACETYLCYSTEINE/
7	CARBOCYSTEINE/
8	DEOXYRIBONUCLEASE II/
9	SALINE SOLUTION, HYPERTONIC/
10	SODIUM CHLORIDE/
11	ISOTONIC SOLUTIONS/
12	exp MANNITOL/
13	(mucoactive? or mucolytic? or expectorant? or mucokinetic? or mucoregulator? or thiol?).mp.
14	(acetyl#steine or nacetyl#steine or carboc#steine or dornase alfa or rhDNase or recombinant human deoxyribonuclease or recombinant human DNase or saline or sodium chloride or mannitol).mp.
15	or/5-14

#	Searches
16	and/4,15

E.17.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	SYSTEMATIC REVIEW/
2	META-ANALYSIS/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic or evidence) adj2 (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
12	random*.ti,ab.
13	factorial*.ti,ab.
14	(crossover* or cross over*).ti,ab.
15	((doubl* or singl*) adj blind*).ti,ab.
16	(assign* or allocat* or volunteer* or placebo*).ti,ab.
17	CROSSOVER PROCEDURE/
18	SINGLE BLIND PROCEDURE/
19	RANDOMIZED CONTROLLED TRIAL/
20	DOUBLE BLIND PROCEDURE/
21	or/12-20
22	or/11,21
23	CYSTIC FIBROSIS/
24	mucov\$.ti,ab.
25	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
26	or/23-25
27	exp MUCOLYTIC AGENT/
28	ACETYLCYSTEINE/
29	CARBOCISTEINE/
30	DORNASE ALFA/
31	SODIUM CHLORIDE/
32	MANNITOL/
33	(mucoactive? or mucolytic? or expectorant? or mucokinetic? or mucoregulator? or thiol?).mp.
34	(acetyl#steine or nacetyl#steine or carboc#steine or dornase alfa or rhDNase or recombinant human deoxyribonuclease or recombinant human DNase or saline or sodium chloride or mannitol).mp.
35	or/27-34

#	Searches
36	and/26,35
37	limit 36 to english language
38	letter.pt. or LETTER/
39	note.pt.
40	editorial.pt.
41	CASE REPORT/ or CASE STUDY/
42	(letter or comment*).ti.
43	or/38-42
44	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
45	43 not 44
46	ANIMAL/ not HUMAN/
47	NONHUMAN/
48	exp ANIMAL EXPERIMENT/
49	exp EXPERIMENTAL ANIMAL/
50	ANIMAL MODEL/
51	exp RODENT/
52	(rat or rats or mouse or mice).ti.
53	or/45-52
54	37 not 53
55	and/22,54

E.18 Antimicrobials

E.18.1 What is the effectiveness of long-term antimicrobial prophylaxis to prevent pulmonary bacterial colonisation with Staphylococcus aureus in people with CF?

E.18.2 What is the effectiveness of antimicrobial treatment for acute pulmonary infection or those with an exacerbation in children and adults with cystic fibrosis?

E.18.3 What is the effectiveness of antimicrobial regimens in suppressing chronic pulmonary infection in children and adults with CF with any of the following pathogens?

- Pseudomonas aeruginosa
- Burkholderia cepacia complex
- Staphylococcus aureus
- Aspergillus fumigatus

E.18.3.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	META-ANALYSIS/
2	META-ANALYSIS AS TOPIC/

#	Searches
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic* or evidence*) adj2 (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
11	randomized controlled trial.pt.
12	controlled clinical trial.pt.
13	pragmatic clinical trial.pt.
14	randomi#ed.ab.
15	placebo.ab.
16	randomly.ab.
17	CLINICAL TRIALS AS TOPIC/
18	trial.ti.
19	or/11-18
20	or/10,19
21	CYSTIC FIBROSIS/
22	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
23	mucov\$.ti,ab.
24	or/21-23
25	exp ANTI-BACTERIAL AGENTS/ or exp ANTIFUNGAL AGENTS/
26	(antibiotic\$ or anti biotic\$ or antimicrob\$ or anti microb\$ or antibacteri\$ or anti bacteri\$ or antimyobacteri\$ or anti myobacteri\$ or antifung\$ or anti fung\$).ti,ab.
27	exp BETA-LACTAMS/ or exp MACROLIDES/ or exp QUINOLONES/ or exp TETRACYCLINES/ or exp TRIAZOLES/ or exp AMINOGLYCOSIDES/ or exp CARBAPENEMS/ or exp SULFONAMIDES/ or exp OXAZOLIDINONES/
28	(penicil?in\$ or co amox#clav or coamox#clav or amox#cil?in or clavulan\$ or flucloxacil?in or floxacil?in or piperacil?in or ticarcil?in or temocil?i\$).mp.
29	(cotrimoxazole or co trimoxazole or trimethoprim or sul??amethoxazole).mp.
30	(beta lactam\$ or betalactam\$ or ce??alosporin\$ or ce??alexin or ce??aclor or ce??radine or ce??tazidime or ce??uroxime or ce??ixime or ce??oxitin or aztreonam or lysine or tazobactam).mp.
31	(tetracycline\$ or doxycycline or minocycline or glycylicycline\$ or tigecycline).mp.
32	(macrolide\$ or az#throm#cin or clarithrom#cin).mp.
33	(rifampicin or rifampin or rifamycin\$).mp.
34	(linzolid or oxazolidinone\$).mp.
35	(fluoroquinolone\$ or quinalone\$ or ciprofloxacin or ciprofloxain or moxifloxacin or clofazimine or phenazine\$).mp.
36	(carbapenem\$ or meropenem or imipenem).mp.
37	(fosfomycin or phosphomycin or phosphonomycin).mp.
38	(aminoglycoside\$ or tobramycin or amikacin or amikin).mp.
39	(polymyxin\$ or colistin or colistimethate or colimycin).mp.
40	(ethambutol or EMB or chloramphenicol).mp.

#	Searches
41	(triazole\$ or itraconazole or voriconazole or posacon#zole or amphotericin or polyene\$).mp.
42	or/25-41
43	24 and 42
44	20 and 43
45	limit 44 to english language
46	LETTER/
47	EDITORIAL/
48	NEWS/
49	exp HISTORICAL ARTICLE/
50	ANECDOTES AS TOPIC/
51	COMMENT/
52	CASE REPORT/
53	(letter or comment*).ti.
54	or/46-53
55	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
56	54 not 55
57	ANIMALS/ not HUMANS/
58	exp ANIMALS, LABORATORY/
59	exp ANIMAL EXPERIMENTATION/
60	exp MODELS, ANIMAL/
61	exp RODENTIA/
62	(rat or rats or mouse or mice).ti.
63	or/56-62
64	45 not 63

E.18.3.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	1 or 2
4	(antibiotic\$ or anti biotic\$ or antimicrob\$ or anti microb\$ or antibacteri\$ or anti bacteri\$ or antimyobacteri\$ or anti myobacteri\$ or antifung\$ or anti fung\$).ti,ab.
5	(penicil?in\$ or co amox#clav or coamox#clav or amox#cil?in or clavulan\$ or flucloxacil?in or floxacil?in or piperacil?in or ticarcil?in or temocil?i\$).mp.
6	(cotrimoxazole or co trimoxazole or trimethoprim or sul??amethoxazole).mp.
7	(beta lactam\$ or betalactam\$ or ce??alospirin\$ or ce??alexin or ce??aclor or ce??radine or ce??tazidime or ce??uroxime or ce??ixime or ce??oxitin or aztreonam or lysine or tazobactam).mp.
8	(tetracycline\$ or doxycycline or minocycline or glycylicycline\$ or tigecycline).mp.
9	(macrolide\$ or az#throm#cin or clarithrom#cin).mp.
10	(rifampicin or rifampin or rifamycin\$).mp.
11	(linzolid or oxazolidinone\$).mp.
12	(fluoroquinolone\$ or quinalone\$ or ciprofloxacin or ciprofloxain or moxifloxacin or clofazimine or phenazine\$).mp.

#	Searches
13	(carbapenem\$ or meropenem or imipenem).mp.
14	(fosfomycin or phosphomycin or phosphonomycin).mp.
15	(aminoglycoside\$ or tobramycin or amikacin or amikin).mp.
16	(polymyxin\$ or colistin or colistimethate or colimycin).mp.
17	(ethambutol or EMB or chloramphenicol).mp.
18	(triazole\$ or itraconazole or voriconazole or posacon#zole or amphotericin or polyene\$).mp.
19	or/4-18
20	3 and 19
21	limit 20 to english language

E.18.3.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials**
 November 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab.
4	or/1-3
5	ANTI-BACTERIAL AGENTS/ or ANTIFUNGAL AGENTS/
6	(ANTIBIOTIC AGENT or ANTIFUNGAL AGENT).kw.
7	(antibiotic\$ or anti biotic\$ or antimicrob\$ or anti microb\$ or antibacteri\$ or anti bacteri\$ or antimyobacteri\$ or anti myobacteri\$ or antifung\$ or anti fung\$).ti,ab.
8	exp BETA-LACTAMS/ or exp MACROLIDES/ or QUINOLONES/ or TETRACYCLINES/ or TRIAZOLES/ or AMINOGLYCOSIDES/ or CARBAPENEMS/ or SULFONAMIDES/ or OXAZOLIDINONES/
9	(BETA LACTAM or QUINOLONE or TRIAZOLE or SULFONAMIDE or OXAZOLIDINONE DERIVATIVE).kw.
10	(penicil?in\$ or co amox#clav or coamox#clav or amox#cil?in or clavulan\$ or flucloxacil?in or floxacil?in or piperacil?in or ticarcil?in or temocil?i\$).mp.
11	(cotrimoxazole or co trimoxazole or trimethoprim or sul??amethoxazole).mp.
12	(beta lactam\$ or betalactam\$ or ce??alosporin\$ or ce??alexin or ce??aclor or ce??radine or ce??tazidime or ce??uroxime or ce??ixime or ce??oxitin or aztreonam or lysine or tazobactam).mp.
13	(tetracycline\$ or doxycycline or minocycline or glycylicycline\$ or tigecycline).mp.
14	(macrolide\$ or az#throm#cin or clarithrom#cin).mp.
15	(rifampicin or rifampin or rifamycin\$).mp.
16	(linzolid or oxazolidinone\$).mp.
17	(fluoroquinolone\$ or quinalone\$ or ciprofloxacin or ciprofloxain or moxifloxacin or clofazimine or phenazine\$).mp.
18	(carbapenem\$ or meropenem or imipenem).mp.
19	(fosfomycin or phosphomycin or phosphonomycin).mp.
20	(aminoglycoside\$ or tobramycin or amikacin or amikin).mp.
21	(polymyxin\$ or colistin or colistimethate or colimycin).mp.
22	(ethambutol or EMB or chloramphenicol).mp.
23	(triazole\$ or itraconazole or voriconazole or posacon#zole or amphotericin or polyene\$).mp.
24	or/5-23

#	Searches
25	4 and 24

E.18.3.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to January 05, 2017, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,tw,tx.
3	mucov\$.ti,tw,tx.
4	or/1-3
5	(ANTI-BACTERIAL AGENTS or ANTIFUNGAL AGENTS or ANTIBIOTIC AGENT or ANTIFUNGAL AGENT).kw.
6	(antibiotic\$ or anti biotic\$ or antimicrob\$ or anti microb\$ or antibacteri\$ or anti bacteri\$ or antimyobacteri\$ or anti myobacteri\$ or antifung\$ or anti fung\$).ti,tw,tx.
7	(BETA-LACTAMS or MACROLIDES or QUINOLONES or TETRACYCLINES or TRIAZOLES or AMINOGLYCOSIDES or CARBAPENEMS or SULFONAMIDES or OXAZOLIDINONES or BETA LACTAM or QUINOLONE or TRIAZOLE or SULFONAMIDE or OXAZOLIDINONE DERIVATIVE).kw.
8	(penicil?in\$ or co amox#clav or coamox#clav or amox#cil?in or clavulan\$ or flucloxacil?in or floxacil?in or piperacil?in or ticarcil?in or temocil?i\$).mp.
9	(cotrimoxazole or co trimoxazole or trimethoprim or sul??amethoxazole).mp.
10	(beta lactam\$ or betalactam\$ or ce??alosporin\$ or ce??alexin or ce??aclor or ce??radine or ce??tazidime or ce??uroxime or ce??ixime or ce??oxitin or aztreonam or lysine or tazobactam).mp.
11	(tetracycline\$ or doxycycline or minocycline or glycylicycline\$ or tigecycline).mp.
12	(macrolide\$ or az#throm#cin or clarithrom#cin).mp.
13	(rifampicin or rifampin or rifamycin\$).mp.
14	(linzolid or oxazolidinone\$).mp.
15	(fluoroquinolone\$ or quinalone\$ or ciprofloxacin or ciprofloxain or moxifloxacin or clofazimine or phenazine\$).mp.
16	(carbapenem\$ or meropenem or imipenem).mp.
17	(fosfomycin or phosphomycin or phosphonomycin).mp.
18	(aminoglycoside\$ or tobramycin or amikacin or amikin).mp.
19	(polymyxin\$ or colistin or colistimethate or colimycin).mp.
20	(ethambutol or EMB or chloramphenicol).mp.
21	(triazole\$ or itraconazole or voriconazole or posacon#zole or amphotericin or polyene\$).mp.
22	or/5-21
23	4 and 22

E.18.3.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment** 4th Quarter 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,tw.

#	Searches
3	mucov\$.ti,tw.
4	or/1-3
5	exp ANTI-BACTERIAL AGENTS/ or exp ANTIFUNGAL AGENTS/
6	(antibiotic\$ or anti biotic\$ or antimicrob\$ or anti microb\$ or antibacteri\$ or anti bacteri\$ or antimyobacteri\$ or anti myobacteri\$ or antifung\$ or anti fung\$).ti,tw.
7	exp BETA-LACTAMS/ or exp MACROLIDES/ or exp QUINOLONONES/ or exp TETRACYCLINES/ or exp TRIAZOLES/ or exp AMINOGLYCOSIDES/ or exp CARBAPENEMS/ or exp SULFONAMIDES/ or exp OXAZOLIDINONES/
8	(penicil?in\$ or co amox#clav or coamox#clav or amox#cil?in or clavulan\$ or flucloxacil?in or floxacil?in or piperacil?in or ticarcil?in or temocil?i\$).mp.
9	(cotrimoxazole or co trimoxazole or trimethoprim or sul??amethoxazole).mp.
10	(beta lactam\$ or betalactam\$ or ce??alosporin\$ or ce??alexin or ce??aclor or ce??radine or ce??tazidime or ce??uroxime or ce??ixime or ce??oxitin or aztreonam or lysine or tazobactam).mp.
11	(tetracycline\$ or doxycycline or minocycline or glycylyccline\$ or tigecycline).mp.
12	(macrolide\$ or az#throm#cin or clarithrom#cin).mp.
13	(rifampicin or rifampin or rifamycin\$).mp.
14	(linzolid or oxazolidinone\$).mp.
15	(fluoroquinolone\$ or quinalone\$ or ciprofloxacin or ciprofloxain or moxifloxacin or clofazimine or phenazine\$).mp.
16	(carbapenem\$ or meropenem or imipenem).mp.
17	(fosfomycin or phosphomycin or phosphonomycin).mp.
18	(aminoglycoside\$ or tobramycin or amikacin or amikin).mp.
19	(polymyxin\$ or colistin or colistimethate or colimycin).mp.
20	(ethambutol or EMB or chloramphenicol).mp.
21	(triazole\$ or itraconazole or voriconazole or posacon#zole or amphotericin or polyene\$).mp.
22	or/5-21
23	4 and 22
24	limit 23 to english language

E.18.3.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	SYSTEMATIC REVIEW/
2	META-ANALYSIS/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic or evidence) adj2 (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

#	Searches
12	random*.ti,ab.
13	factorial*.ti,ab.
14	(crossover* or cross over*).ti,ab.
15	((doubl* or singl*) adj blind*).ti,ab.
16	(assign* or allocat* or volunteer* or placebo*).ti,ab.
17	CROSSOVER PROCEDURE/
18	SINGLE BLIND PROCEDURE/
19	RANDOMIZED CONTROLLED TRIAL/
20	DOUBLE BLIND PROCEDURE/
21	or/12-20
22	or/11,21
23	exp CYSTIC FIBROSIS/
24	mucov\$.ti,ab.
25	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
26	or/23-25
27	exp ANTIBIOTIC AGENT/ or exp ANTIFUNGAL AGENT/
28	(antibiotic\$ or anti biotic\$ or antimicrob\$ or anti microb\$ or antibacteri\$ or anti bacteri\$ or antimyobacteri\$ or anti myobacteri\$ or antifung\$ or anti fung\$).ti,ab.
29	exp BETA LACTAM/ or exp QUINOLONE/ or exp TRIAZOLE/ or exp SULFONAMIDE/ or exp OXAZOLIDINONE DERIVATIVE/
30	(penicil?in\$ or co amox#clav or coamox#clav or amox#cil?in or clavulan\$ or flucloxacil?in or floxacil?in or piperacil?in or ticarcil?in or temocil?i\$).mp.
31	(cotrimoxazole or co trimoxazole or trimethoprim or sul??amethoxazole).mp.
32	(beta lactam\$ or betalactam\$ or ce??alosporin\$ or ce??alexin or ce??aclor or ce??radine or ce??tazidime or ce??uroxime or ce??ixime or ce??oxitin or aztreonam or lysine or tazobactam).mp.
33	(tetracycline\$ or doxycycline or minocycline or glycylicycline\$ or tigecycline).mp.
34	(macrolide\$ or az#throm#cin or clarithrom#cin).mp.
35	(rifampicin or rifampin or rifamycin\$).mp.
36	(linzolid or oxazolidinone\$).mp.
37	(fluoroquinolone\$ or quinalone\$ or ciprofloxacin or ciprofloxain or moxifloxacin or clofazimine or phenazine\$).mp.
38	(carbapenem\$ or meropenem or imipenem).mp.
39	(fosfomycin or phosphomycin or phosphonomycin).mp.
40	(aminoglycoside\$ or tobramycin or amikacin or amikin).mp.
41	(polymyxin\$ or colistin or colistimethate or colimycin).mp.
42	(ethambutol or EMB or chloramphenicol).mp.
43	(triazole\$ or itraconazole or voriconazole or posaconazole or amphotericin or polyene\$).mp.
44	or/27-43
45	26 and 44
46	22 and 45
47	limit 46 to english language
48	letter.pt. or LETTER/
49	note.pt.
50	editorial.pt.
51	CASE REPORT/ or CASE STUDY/

#	Searches
52	(letter or comment*).ti.
53	or/48-52
54	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
55	53 not 54
56	ANIMAL/ not HUMAN/
57	NONHUMAN/
58	exp ANIMAL EXPERIMENT/
59	exp EXPERIMENTAL ANIMAL/
60	ANIMAL MODEL/
61	exp RODENT/
62	(rat or rats or mouse or mice).ti.
63	or/55-62
64	47 not 63

E.19 What is the effectiveness of immunomodulatory agents in the management of lung disease, for example corticosteroids, azithromycin?

E.19.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	META-ANALYSIS/
2	META-ANALYSIS AS TOPIC/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic* or evidence*) adj2 (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
11	randomized controlled trial.pt.
12	controlled clinical trial.pt.
13	pragmatic clinical trial.pt.
14	randomi#ed.ab.
15	placebo.ab.
16	randomly.ab.
17	CLINICAL TRIALS AS TOPIC/
18	trial.ti.
19	or/11-18
20	or/10,19

#	Searches
21	CYSTIC FIBROSIS/
22	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
23	mucov\$.ti,ab.
24	or/21-23
25	(immunomodulator\$ or immune modulator\$).ti,ab.
26	exp ADRENAL CORTEX HORMONES/ or exp STEROIDS/
27	(steroid\$ or corticoid\$ or glucocorticoid\$ or corticosteroid\$ or glucocorticosteroid\$).ti,ab.
28	(adrenal adj2 cortex adj2 hormone\$).ti,ab.
29	(beclomet#a#on\$ or bude#onide\$ or flutica#one\$ or methylpredni#olone\$ or predni#olone\$).ti,ab.
30	exp AZITHROMYCIN/
31	az#throm#cin\$.ti,ab.
32	exp ANTI-INFLAMMATORY AGENTS, NON-STEROIDAL/
33	((anti-inflammat\$ or antiinflammat\$) adj3 (non-steroid\$ or nonsteroid\$ or drug\$ or agent\$ or therap\$ or medic\$)).ti,ab.
34	(ibuprofen\$ or nsaid\$).ti,ab.
35	or/25-34
36	and/20,24,35
37	limit 36 to english language
38	LETTER/
39	EDITORIAL/
40	NEWS/
41	exp HISTORICAL ARTICLE/
42	ANECDOTES AS TOPIC/
43	COMMENT/
44	CASE REPORT/
45	(letter or comment*).ti.
46	or/38-45
47	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
48	46 not 47
49	ANIMALS/ not HUMANS/
50	exp ANIMALS, LABORATORY/
51	exp ANIMAL EXPERIMENTATION/
52	exp MODELS, ANIMAL/
53	exp RODENTIA/
54	(rat or rats or mouse or mice).ti.
55	or/48-54
56	37 not 55

E.19.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	1 or 2

#	Searches
4	(immunomodulator\$ or immune modulator\$).ti,ab.
5	(steroid\$ or corticoid\$ or glucocorticoid\$ or corticosteroid\$ or glucocorticosteroid\$).ti,ab.
6	(adrenal adj2 cortex adj2 hormone\$).ti,ab.
7	(beclomet?a#on\$ or bude#onide\$ or flutica#one\$ or methylpredni#olone\$ or predni#olone\$).ti,ab.
8	az#throm#cin\$.ti,ab.
9	((anti-inflammat\$ or antiinflammat\$) adj3 (non-steroid\$ or nonsteroid\$ or drug\$ or agent\$ or therap\$ or medic\$)).ti,ab.
10	(ibuprofen\$ or nsaid\$).ti,ab.
11	or/4-10
12	3 and 11
13	limit 12 to english language

E.19.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** November 2016 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab.
4	or/1-3
5	(immunomodulator\$ or immune modulator\$).ti,ab.
6	ADRENAL CORTEX HORMONES/ or STEROIDS/
7	CORTICOSTEROID.kw.
8	(steroid\$ or corticoid\$ or glucocorticoid\$ or corticosteroid\$ or glucocorticosteroid\$).ti,ab.
9	(adrenal adj2 cortex adj2 hormone\$).ti,ab.
10	(beclomet?a#on\$ or bude#onide\$ or flutica#one\$ or methylpredni#olone\$ or predni#olone\$).ti,ab.
11	AZITHROMYCIN/ or AZITHROMYCIN.kw.
12	az#throm#cin\$.ti,ab.
13	ANTI-INFLAMMATORY AGENTS, NON-STEROIDAL/ or NONSTEROID ANTIINFLAMMATORY AGENT.kw.
14	((anti-inflammat\$ or antiinflammat\$) adj3 (non-steroid\$ or nonsteroid\$ or drug\$ or agent\$ or therap\$ or medic\$)).ti,ab.
15	(ibuprofen\$ or nsaid\$).ti,ab.
16	or/5-15
17	4 and 16

E.19.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to December 30, 2016, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,tw,tx.

#	Searches
3	mucov\$.ti,tw,tx.
4	or/1-3
5	(immunomodulator\$ or immune modulator\$).ti,tw,tx.
6	(ADRENAL CORTEX HORMONES or STEROIDS or CORTICOSTEROID).kw.
7	(steroid\$ or corticoid\$ or glucocorticoid\$ or corticosteroid\$ or glucocorticosteroid\$).ti,tw,tx.
8	(adrenal adj2 cortex adj2 hormone\$).ti,tw,tx.
9	(beclomet?a#on\$ or bude#onide\$ or flutica#one\$ or methylpredni#olone\$ or predni#olone\$).ti,tw,tx.
10	AZITHROMYCIN.kw.
11	az#throm#cin\$.ti,tw,tx.
12	(ANTI-INFLAMMATORY AGENTS, NON-STEROIDAL or NONSTEROID ANTIINFLAMMATORY AGENT).kw.
13	((anti-inflammat\$ or antiinflammat\$) adj3 (non-steroid\$ or nonsteroid\$ or drug\$ or agent\$ or therap\$ or medic\$)).ti,tw,tx.
14	(ibuprofen\$ or nsaid\$).ti,tw,tx.
15	or/5-14
16	4 and 15

E.19.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,tw.
3	mucov\$.ti,tw.
4	or/1-3
5	(immunomodulator\$ or immune modulator\$).ti,tw.
6	exp ADRENAL CORTEX HORMONES/ or exp STEROIDS/
7	(steroid\$ or corticoid\$ or glucocorticoid\$ or corticosteroid\$ or glucocorticosteroid\$).ti,tw.
8	(adrenal adj2 cortex adj2 hormone\$).ti,tw.
9	(beclomet?a#on\$ or bude#onide\$ or flutica#one\$ or methylpredni#olone\$ or predni#olone\$).ti,tw.
10	exp AZITHROMYCIN/
11	az#throm#cin\$.ti,tw.
12	exp ANTI-INFLAMMATORY AGENTS, NON-STEROIDAL/
13	((anti-inflammat\$ or antiinflammat\$) adj3 (non-steroid\$ or nonsteroid\$ or drug\$ or agent\$ or therap\$ or medic\$)).ti,tw.
14	(ibuprofen\$ or nsaid\$).ti,tw.
15	or/5-14
16	4 and 15

E.19.6 Database: Embase

Last searched on **Embase 1974 to 2017 Week 01** on 4th January 2017.

#	Searches
1	SYSTEMATIC REVIEW/

#	Searches
2	META-ANALYSIS/
3	(meta analy* or metanaly* or metaanaly*).ti,ab.
4	((systematic or evidence) adj2 (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
12	random*.ti,ab.
13	factorial*.ti,ab.
14	(crossover* or cross over*).ti,ab.
15	((doubl* or singl*) adj blind*).ti,ab.
16	(assign* or allocat* or volunteer* or placebo*).ti,ab.
17	CROSSOVER PROCEDURE/
18	SINGLE BLIND PROCEDURE/
19	RANDOMIZED CONTROLLED TRIAL/
20	DOUBLE BLIND PROCEDURE/
21	or/12-20
22	or/11,21
23	exp CYSTIC FIBROSIS/
24	mucov\$.ti,ab.
25	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
26	or/23-25
27	(immunomodulator\$ or immune modulator\$).ti,ab.
28	exp CORTICOSTEROID/
29	(steroid\$ or corticoid\$ or glucocorticoid\$ or corticosteroid\$ or glucocorticosteroid\$).ti,ab.
30	(adrenal adj2 cortex adj2 hormone\$).ti,ab.
31	(beclomet#a#on\$ or bude#onide\$ or flutica#one\$ or methylpredni#olone\$ or predni#olone\$).ti,ab.
32	exp AZITHROMYCIN/
33	az#throm#cin\$.ti,ab.
34	exp NONSTEROID ANTIINFLAMMATORY AGENT/
35	((anti-inflammat\$ or antiinflammat\$) adj3 (non-steroid\$ or nonsteroid\$ or drug\$ or agent\$ or therap\$ or medic\$)).ti,ab.
36	(ibuprofen\$ or nsaid\$).ti,ab.
37	or/27-36
38	and/22,26,37
39	limit 38 to english language
40	letter.pt. or LETTER/
41	note.pt.
42	editorial.pt.
43	CASE REPORT/ or CASE STUDY/

#	Searches
44	(letter or comment*).ti.
45	or/40-44
46	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
47	45 not 46
48	ANIMAL/ not HUMAN/
49	NONHUMAN/
50	exp ANIMAL EXPERIMENT/
51	exp EXPERIMENTAL ANIMAL/
52	ANIMAL MODEL/
53	exp RODENT/
54	(rat or rats or mouse or mice).ti.
55	or/47-54
56	39 not 55

E.20 Cross infection control

E.20.1 What is the effectiveness of cohorting on the basis of pathogen status versus not cohorting on the basis of pathogen status in reducing transmission of CF pathogens?

E.20.2 What is the effectiveness of different models of segregating patient's in reducing transmission of CF pathogens?

E.20.3 What is the effectiveness of individual protective equipment in reducing transmission of CF pathogens? 4) What is the effectiveness of the combination of cohorting, segregating and protective equipment in reducing transmission of CF pathogens?

E.20.3.1 Database: Medline

Last searched on **Ovid MEDLINE(R)** 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	exp CROSS INFECTION/pc [Prevention & Control]
6	exp INFECTION CONTROL/
7	COMMUNICABLE DISEASE CONTROL/
8	INFECTIOUS DISEASE TRANSMISSION, PATIENT-TO-PROFESSIONAL/pc [Prevention & Control]
9	INFECTIOUS DISEASE TRANSMISSION, PROFESSIONAL-TO-PATIENT/pc [Prevention & Control]
10	DISEASE TRANSMISSION, INFECTIOUS/pc [Prevention & Control]
11	BACTERIAL INFECTIONS/pc, tm [Prevention & Control, Transmission]
12	PSEUDOMONAS INFECTIONS/pc, tm [Prevention & Control, Transmission]

#	Searches
13	BURKHOLDERIA INFECTIONS/pc, tm [Prevention & Control, Transmission]
14	STAPHYLOCOCCAL INFECTIONS/pc, tm [Prevention & Control, Transmission]
15	HAEMOPHILUS INFECTIONS/pc, tm [Prevention & Control, Transmission]
16	MYCOBACTERIUM INFECTIONS, NONTUBERCULOUS/pc, tm [Prevention & Control, Transmission]
17	((infect\$ or crossinfect\$ or crosstransmi\$ or contamina\$ or crosscontamina\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
18	((nosocomial or hospital acquired) adj3 (disease? or infect\$ or pathogen\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
19	((disease? or infect\$ or pathogen\$ or bacteri\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
20	((pseudomon\$ or burkholder\$ or staphylococc\$ or MRSA or h?emophil\$ or mycobacteri\$ or aspergill\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
21	or/5-20
22	PATIENT ISOLATION/
23	PATIENTS' ROOMS/
24	((patient? or clinic?) adj3 (cohorted or cohorting or isolate or isolating or isolation or segregat\$ or separat\$ or seclu\$ or quarantin\$ or confine or confined or confining)).ti,ab.
25	((patient? or inpatient? or single-patient or clinic?) adj3 (ensuite or bathroom? or playroom? or room? or facility or facilities or waiting)).ti,ab.
26	or/22-25
27	PATIENT ISOLATORS/
28	PERSONAL PROTECTIVE EQUIPMENT/
29	PROTECTIVE DEVICES/
30	PROTECTIVE CLOTHING/
31	GLOVES, PROTECTIVE/
32	EYE PROTECTIVE DEVICES/
33	MASKS/
34	(glove? or mask? or gown? or apron? or glasses or goggles).ti,ab.
35	(protect\$ adj3 (cloth\$ or equip\$)).ti,ab.
36	or/27-35
37	or/21,26,36
38	and/4,37
39	limit 38 to english language
40	LETTER/
41	EDITORIAL/
42	NEWS/
43	exp HISTORICAL ARTICLE/
44	ANECDOTES AS TOPIC/
45	COMMENT/
46	CASE REPORT/
47	(letter or comment*).ti.
48	or/40-47
49	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
50	48 not 49
51	ANIMALS/ not HUMANS/

#	Searches
52	exp ANIMALS, LABORATORY/
53	exp ANIMAL EXPERIMENTATION/
54	exp MODELS, ANIMAL/
55	exp RODENTIA/
56	(rat or rats or mouse or mice).ti.
57	or/50-56
58	39 not 57

E.20.3.2 Database: Medline In-Process & Other Non-Indexed Citations

Last searched on **Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 04, 2017 on 5th January 2017.

#	Searches
1	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
2	mucov\$.ti,ab.
3	or/1-2
4	((infect\$ or crossinfect\$ or crosstransi\$ or contamina\$ or crosscontamina\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
5	((nosocomial or hospital acquired) adj3 (disease? or infect\$ or pathogen\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
6	((disease? or infect\$ or pathogen\$ or bacteri\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
7	((pseudomon\$ or burkholder\$ or staphylococc\$ or MRSA or h?emophil\$ or mycobacteri\$ or aspergill\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
8	or/4-7
9	((patient? or clinic?) adj3 (cohorted or cohorting or isolate or isolating or isolation or segregat\$ or separat\$ or seclu\$ or quarantin\$ or confine or confined or confining)).ti,ab.
10	((patient? or inpatient? or single-patient or clinic?) adj3 (ensuite or bathroom? or playroom? or room? or facility or facilities or waiting)).ti,ab.
11	or/9-10
12	(glove? or mask? or gown? or apron? or glasses or goggles).ti,ab.
13	(protect\$ adj3 (cloth\$ or equip\$)).ti,ab.
14	or/12-13
15	or/8,11,14
16	and/3,15

E.20.3.3 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** November 2016 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
3	mucov\$.ti,ab.
4	or/1-3
5	exp CROSS INFECTION/pc [Prevention & Control]
6	exp INFECTION CONTROL/
7	COMMUNICABLE DISEASE CONTROL/

#	Searches
8	INFECTIOUS DISEASE TRANSMISSION, PATIENT-TO-PROFESSIONAL/pc [Prevention & Control]
9	INFECTIOUS DISEASE TRANSMISSION, PROFESSIONAL-TO-PATIENT/pc [Prevention & Control]
10	DISEASE TRANSMISSION, INFECTIOUS/pc [Prevention & Control]
11	BACTERIAL INFECTIONS/pc, tm [Prevention & Control, Transmission]
12	PSEUDOMONAS INFECTIONS/pc, tm [Prevention & Control, Transmission]
13	BURKHOLDERIA INFECTIONS/pc, tm [Prevention & Control, Transmission]
14	STAPHYLOCOCCAL INFECTIONS/pc, tm [Prevention & Control, Transmission]
15	HAEMOPHILUS INFECTIONS/pc, tm [Prevention & Control, Transmission]
16	MYCOBACTERIUM INFECTIONS, NONTUBERCULOUS/pc, tm [Prevention & Control, Transmission]
17	((infect\$ or crossinfect\$ or crosstranmi\$ or contamina\$ or crosscontamina\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
18	((nosocomial or hospital acquired) adj3 (disease? or infect\$ or pathogen\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
19	((disease? or infect\$ or pathogen\$ or bacteri\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
20	((pseudomon\$ or burkholder\$ or staphylococc\$ or MRSA or h?emophil\$ or mycobacteri\$ or aspergill\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
21	or/5-20
22	PATIENT ISOLATION/
23	PATIENTS' ROOMS/
24	((patient? or clinic?) adj3 (cohorted or cohorting or isolate or isolating or isolation or segregat\$ or separat\$ or seclu\$ or quarantin\$ or confine or confined or confining)).ti,ab.
25	((patient? or inpatient? or single-patient or clinic?) adj3 (ensuite or bathroom? or playroom? or room? or facility or facilities or waiting)).ti,ab.
26	or/22-25
27	PATIENT ISOLATORS/
28	PROTECTIVE DEVICES/
29	PROTECTIVE CLOTHING/
30	GLOVES, PROTECTIVE/
31	EYE PROTECTIVE DEVICES/
32	MASKS/
33	(glove? or mask? or gown? or apron? or glasses or goggles).ti,ab.
34	(protect\$ adj3 (cloth\$ or equip\$)).ti,ab.
35	or/27-34
36	or/21,26,35
37	and/4,36

E.20.3.4 Database: Cochrane Database of Systematic Reviews and Database of Abstracts of Reviews of Effects

Last searched on **EBM Reviews - Cochrane Database of Systematic Reviews** 2005 to January 05, 2017, **EBM Reviews - Database of Abstracts of Reviews of Effects** 1st Quarter 2015 on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS.kw.

#	Searches
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,tw,tx.
4	or/1-3
5	CROSS INFECTION.kw.
6	INFECTION CONTROL.kw.
7	COMMUNICABLE DISEASE CONTROL.kw.
8	INFECTIOUS DISEASE TRANSMISSION, PATIENT-TO-PROFESSIONAL.kw.
9	INFECTIOUS DISEASE TRANSMISSION, PROFESSIONAL-TO-PATIENT.kw.
10	DISEASE TRANSMISSION, INFECTIOUS.kw.
11	BACTERIAL INFECTIONS.kw.
12	PSEUDOMONAS INFECTIONS.kw.
13	BURKHOLDERIA INFECTIONS.kw.
14	STAPHYLOCOCCAL INFECTIONS.kw.
15	HAEMOPHILUS INFECTIONS.kw.
16	MYCOBACTERIUM INFECTIONS, NONTUBERCULOUS.kw.
17	((infect\$ or crossinfect\$ or crosstransi\$ or contamina\$ or crosscontamina\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,tw,tx.
18	((nosocomial or hospital acquired) adj3 (disease? or infect\$ or pathogen\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,tw,tx.
19	((disease? or infect\$ or pathogen\$ or bacteri\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,tw,tx.
20	((pseudomon\$ or burkholder\$ or staphylococc\$ or MRSA or h?emophil\$ or mycobacteri\$ or aspergill\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,tw,tx.
21	or/5-20
22	PATIENT ISOLATION.kw.
23	PATIENTS' ROOMS.kw.

E.20.3.5 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3
5	exp CROSS INFECTION/pc [Prevention & Control]
6	exp INFECTION CONTROL/
7	COMMUNICABLE DISEASE CONTROL/
8	DISEASE TRANSMISSION, PATIENT-TO-PROFESSIONAL/
9	DISEASE TRANSMISSION, PROFESSIONAL-TO-PATIENT/
10	DISEASE TRANSMISSION/
11	BACTERIAL INFECTIONS/
12	PSEUDOMONAS INFECTIONS/
13	BURKHOLDERIA INFECTIONS/
14	STAPHYLOCOCCAL INFECTIONS/

#	Searches
15	HAEMOPHILUS INFECTIONS/
16	MYCOBACTERIUM INFECTIONS/
17	((infect\$ or crossinfect\$ or crosstranmi\$ or contamina\$ or crosscontamina\$) adj3 (prevent\$ or control\$ or reduc\$)).tw.
18	((nosocomial or hospital acquired) adj3 (disease? or infect\$ or pathogen\$) adj3 (prevent\$ or control\$ or reduc\$)).tw.
19	((disease? or infect\$ or pathogen\$ or bacteri\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).tw.
20	((pseudomon\$ or burkholder\$ or staphylococc\$ or MRSA or h?emophil\$ or mycobacteri\$ or aspergill\$) adj3 (transmi\$ or acquir\$ or spread\$) adj3 (prevent\$ or control\$ or reduc\$)).tw.
21	or/5-20
22	PATIENT ISOLATION/
23	PATIENTS' ROOMS/
24	((patient? or clinic?) adj3 (cohorted or cohorting or isolate or isolating or isolation or segregat\$ or separat\$ or seclu\$ or quarantin\$ or confine or confined or confining)).tw.
25	((patient? or inpatient? or single-patient or clinic?) adj3 (ensuite or bathroom? or playroom? or room? or facility or facilities or waiting)).tw.
26	or/22-25
27	PATIENT ISOLATORS/
28	PROTECTIVE CLOTHING/
29	PROTECTIVE DEVICES/
30	GLOVES, PROTECTIVE/
31	EYE PROTECTIVE DEVICES/
32	MASKS/
33	(glove? or mask? or gown? or apron? or glasses or goggles).tw.
34	(protect\$ adj3 (cloth\$ or equip\$)).tw.
35	or/27-34
36	or/21,26,35
37	and/4,36

E.20.3.6 Database: Embase

Last searched on **Embase** 1974 to 2017 Week 01 on 4th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
3	mucov\$.ti,ab.
4	or/1-3
5	CROSS INFECTION/pc [Prevention]
6	INFECTION CONTROL/
7	INFECTION RISK/
8	HOSPITAL INFECTION/pc [Prevention]
9	DISEASE TRANSMISSION/pc [Prevention]
10	BACTERIAL TRANSMISSION/pc [Prevention]
11	PSEUDOMONAS INFECTION/pc [Prevention]
12	exp BURKHOLDERIA INFECTION/pc [Prevention]
13	exp STAPHYLOCOCCUS INFECTION/pc [Prevention]

#	Searches
14	exp HAEMOPHILUS INFECTION/pc [Prevention]
15	MYCOBACTERIOSIS/pc [Prevention]
16	ASPERGILLOSIS/pc [Prevention]
17	((infect\$ or crossinfect\$ or crosstransmi\$ or contamina\$ or crosscontamina\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
18	((nosocomial or hospital acquired) adj3 (disease? or infect\$ or pathogen\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
19	((disease? or infect\$ or pathogen\$ or bacteri\$) adj3 (transmi\$ or spread\$ or acquir\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
20	((pseudomon\$ or burkholder\$ or staphylococc\$ or MRSA or h?emophil\$ or mycobacteri\$ or aspergill\$) adj3 (transmi\$ or spread\$ or acquir\$) adj3 (prevent\$ or control\$ or reduc\$)).ti,ab.
21	or/5-20
22	((patient? or clinic?) adj3 (cohorted or cohorting or isolate or isolating or isolation or segregat\$ or separat\$ or seclu\$ or quarantin\$ or confine or confined or confining)).ti,ab.
23	((patient? or inpatient? or single-patient? or clinic?) adj3 (ensuite or bathroom? or playroom? or room? or facility or facilities or waiting)).ti,ab.
24	or/22-23
25	PATIENT ISOLATOR/
26	PROTECTIVE EQUIPMENT/
27	PROTECTIVE CLOTHING/
28	EYE PROTECTIVE DEVICE/
29	SURGICAL GLOVE/
30	(glove? or mask? or gown? or apron? or glasses or goggles).ti,ab.
31	(protect\$ adj3 (cloth\$ or equip\$)).ti,ab.
32	or/25-31
33	or/21,24,32
34	and/4,33
35	limit 34 to english language
36	letter.pt. or LETTER/
37	note.pt.
38	editorial.pt.
39	CASE REPORT/ or CASE STUDY/
40	(letter or comment*).ti.
41	or/36-40
42	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
43	41 not 42
44	ANIMAL/ not HUMAN/
45	NONHUMAN/
46	exp ANIMAL EXPERIMENT/
47	exp EXPERIMENTAL ANIMAL/
48	ANIMAL MODEL/
49	exp RODENT/
50	(rat or rats or mouse or mice).ti.
51	or/43-50
52	35 not 51

E.21 Health Economics global search

E.21.1 Database: Medline

Last searched on Ovid MEDLINE(R) 1946 to December Week 1 2016 on 5th January 2017.

#	Searches
1	ECONOMICS/
2	VALUE OF LIFE/
3	exp "COSTS AND COST ANALYSIS"/
4	exp ECONOMICS, HOSPITAL/
5	exp ECONOMICS, MEDICAL/
6	exp RESOURCE ALLOCATION/
7	ECONOMICS, NURSING/
8	ECONOMICS, PHARMACEUTICAL/
9	exp "FEES AND CHARGES"/
10	exp BUDGETS/
11	budget*.ti,ab.
12	cost*.ti,ab.
13	(economic* or pharmaco?economic*).ti,ab.
14	(price* or pricing*).ti,ab.
15	(financ* or fee or fees or expenditure* or saving*).ti,ab.
16	(value adj2 (money or monetary)).ti,ab.
17	resourc* allocat*.ti,ab.
18	(fund or funds or funding* or funded).ti,ab.
19	(ration or rations or rationing* or rationed).ti,ab.
20	ec.fs.
21	or/1-20
22	CYSTIC FIBROSIS/
23	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
24	mucov\$.ti,ab.
25	or/22-24
26	and/21,25
27	limit 26 to english language
28	LETTER/
29	EDITORIAL/
30	NEWS/
31	exp HISTORICAL ARTICLE/
32	ANECDOTES AS TOPIC/
33	COMMENT/
34	CASE REPORT/
35	(letter or comment*).ti.
36	or/28-35
37	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
38	36 not 37
39	ANIMALS/ not HUMANS/
40	exp ANIMALS, LABORATORY/
41	exp ANIMAL EXPERIMENTATION/

#	Searches
42	exp MODELS, ANIMAL/
43	exp RODENTIA/
44	(rat or rats or mouse or mice).ti.
45	or/38-44
46	27 not 45

E.21.2 Database: Cochrane Central Register of Controlled Trials

Last searched on **EBM Reviews - Cochrane Central Register of Controlled Trials** November 2016 on 10th January 2017.

#	Searches
1	ECONOMICS/
2	VALUE OF LIFE/
3	exp "COSTS AND COST ANALYSIS"/
4	exp ECONOMICS, HOSPITAL/
5	exp ECONOMICS, MEDICAL/
6	exp RESOURCE ALLOCATION/
7	ECONOMICS, NURSING/
8	ECONOMICS, PHARMACEUTICAL/
9	exp "FEES AND CHARGES"/
10	exp BUDGETS/
11	budget*.ti,ab,kw.
12	cost*.ti,ab,kw.
13	(economic* or pharmaco?economic*).ti,ab,kw.
14	(price* or pricing*).ti,ab,kw.
15	(financ* or fee or fees or expenditure* or saving*).ti,ab,kw.
16	(value adj2 (money or monetary)).ti,ab,kw.
17	resourc* allocat*.ti,ab,kw.
18	(fund or funds or funding* or funded).ti,ab,kw.
19	(ration or rations or rationing* or rationed).ti,ab,kw.
20	ec.fs.
21	or/1-20
22	CYSTIC FIBROSIS/
23	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab,kw.
24	mucov\$.ti,ab,kw.
25	or/22-24
26	and/21,25

E.21.3 Database: NHS Economic Evaluation Database

Last searched on **EBM Reviews - NHS Economic Evaluation Database 1st Quarter 2015** on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.

#	Searches
3	mucov\$.tw.
4	or/1-3

E.21.4 Database: Health Technology Assessment

Last searched on **EBM Reviews - Health Technology Assessment 4th Quarter 2016** on 10th January 2017.

#	Searches
1	CYSTIC FIBROSIS/
2	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).tw.
3	mucov\$.tw.
4	or/1-3

E.21.5 Database: Embase

Last searched on **Embase 1974 to 2017 Week 01** on 4th January 2017.

#	Searches
1	HEALTH ECONOMICS/
2	exp ECONOMIC EVALUATION/
3	exp HEALTH CARE COST/
4	exp FEE/
5	BUDGET/
6	FUNDING/
7	RESOURCE ALLOCATION/
8	budget*.ti,ab.
9	cost*.ti,ab.
10	(economic* or pharmaco?economic*).ti,ab.
11	(price* or pricing*).ti,ab.
12	(financ* or fee or fees or expenditure* or saving*).ti,ab.
13	(value adj2 (money or monetary)).ti,ab.
14	resourc* allocat*.ti,ab.
15	(fund or funds or funding* or funded).ti,ab.
16	(ration or rations or rationing* or rationed).ti,ab.
17	or/1-16
18	CYSTIC FIBROSIS/
19	mucov\$.ti,ab.
20	((cystic or pancrea\$) adj2 (fibrosis or fibrocystic)).ti,ab.
21	or/18-20
22	and/17,21
23	limit 22 to english language
24	conference abstract.pt.
25	letter.pt. or LETTER/
26	note.pt.
27	editorial.pt.
28	CASE REPORT/ or CASE STUDY/
29	(letter or comment* or abstracts).ti.
30	or/24-29

#	Searches
31	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
32	30 not 31
33	ANIMAL/ not HUMAN/
34	NONHUMAN/
35	exp ANIMAL EXPERIMENT/
36	exp EXPERIMENTAL ANIMAL/
37	ANIMAL MODEL/
38	exp RODENT/
39	(rat or rats or mouse or mice).ti.
40	or/32-39
41	23 not 40