

## Appendix D: Search strategies

### D.1 Search strategy question 1

#### Search strategies

Database: Medline Dates searched: 1946 to February 2014

Strategy used:

1. exp Cholelithiasis/ or Choledocholithiasis/
2. cholelithiasis.tw.
3. exp Cholecystitis/
4. (gall stone\* or gallstone\*).tw.
5. (cholecystitis or choledocholithiasis or cholecystolithiasis).tw.
6. ((gallbladder or gall bladder) adj3 inflam\*).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. exp abdominal pain/
9. ((right upper quadrant adj3 pain\*) or (epigast\* adj3 pain\*) or (abdom\* adj 3 pain\*)).tw.
10. exp dyspepsia/
11. (dyspepsia or indigestion).tw.
12. colic/ and exp biliary tract diseases/
13. (colic adj3 biliary\*).tw.
14. exp pancreatitis/
15. (pancreatitis or (pancrea\* adj3 inflam\*).tw.
16. jaundice,obstructive/
17. ((obstructive\* adj3 jaundice) or (post-hepatic adj3 jaundice) or (post hepatic adj3 jaundice)).tw.
18. exp cholangitis/

19. (cholangitis or (bil\* adj3 inflam\*)).tw.
20. exp heart/ and exp pain/
21. ((heart or cardiac) adj3 pain\*).tw.
22. or/8-21
23. 22 and 7
24. (sensitiv: or diagnos:).mp. or di.fs.
25. incidence.sh. or exp mortality/
26. follow-up studies.sh. or prognos:.tw. or predict:.tw. or course:.tw.
27. or/24-26
28. 23 and 27
29. animals/ not humans/
30. 28 not 29
31. limit 30 to english language

**Database:** Embase **Dates searched:** 1974 to 2014 week 06

**Strategy used:**

1. exp \*cholelithiasis/
2. exp \*common bile duct stone/
3. exp \*cholecystitis/
4. (gall stone\* or gallstone\*).tw.
5. (cholelithiasis or cholecystitis or choledocholithiasis or cholecystolithiasis).tw.
6. ((gallbladder or gall bladder) adj3 inflam\*).tw.

7. 1 or 2 or 3 or 4 or 5 or 6
8. exp \*abdominal pain/
9. ((right upper quadrant adj3 pain\*) or (epigast\* adj3 pain\*) or (abdom\* adj 3 pain\*)).tw.
10. exp \*dyspepsia/
11. (dyspepsia or indigestion).tw.
12. exp \*biliary colic/
13. (colic adj3 biliary\*).tw.
14. exp \*pancreatitis/
15. (pancreatitis or (pancrea\* adj3 inflam\*)).tw.
16. exp \*obstructive jaundice/
17. ((obstructive\* adj3 jaundice) or (post-hepatic adj3 jaundice) or (post hepatic adj3 jaundice)).tw.
18. exp \*cholangitis/
19. (cholangitis or (bil\* adj3 inflam\*)).tw.
20. exp \*heart/ and exp \*pain/
21. ((heart or cardiac) adj3 pain\*).tw.
22. exp \*epigastric pain/
23. 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22
24. 7 and 23
25. di.fs. or predict\*.tw. or specificity.tw.
26. exp disease course/ or risk\*.mp. or diagnos\*.mp. or follow-up.mp. or ep.fs. or outcome.tw.
27. 25 or 26
28. 24 and 27
29. Nonhuman/ not Human/
30. 28 not 29
31. limit 30 to (conference abstract or conference paper)
32. 30 not 31

33. limit 32 to english language

34. limit 33 to embase

**Database:** Cochrane/Wiley **Dates searched:** to February 2014

Strategy used:

#1 MeSH descriptor: [Cholelithiasis] explode all trees

#2 MeSH descriptor: [Choledocholithiasis] explode all trees

#3 MeSH descriptor: [Cholecystitis] explode all trees

#4 cholelithiasis or cholecystitis or choledocholithiasis or cholecystolithiasis:ti,ab,kw  
(Word variations have been searched)

#5 gallstone\* or gall stone\*:ti,ab,kw (Word variations have been searched)

#6 ((gallbladder or gall bladder) near/3 inflam\*):ti,ab,kw (Word variations have been searched)

#7 #1 or #2 or #3 or #4 or #5 or #6

#8 MeSH descriptor: [Abdominal Pain] explode all trees

#9 ((right upper quadrant near/3 pain\*) or (epigast\* near/3 pain\*) or (abdom\* near/3 pain\*)):ti,ab,kw (Word variations have been searched)

#10 MeSH descriptor: [Dyspepsia] explode all trees

#11 dyspepsia or indigestion:ti,ab,kw (Word variations have been searched)

#12 MeSH descriptor: [Colic] explode all trees

#13 MeSH descriptor: [Biliary Tract Diseases] explode all trees

#14 #12 and #13

#15 colic near/3 biliary\*:ti,ab,kw (Word variations have been searched)

- #16 MeSH descriptor: [Pancreatitis] explode all trees
- #17 (pancreatitis or (pancrea\* near/3 inflam\*)):ti,ab,kw (Word variations have been searched)
- #18 MeSH descriptor: [Jaundice, Obstructive] explode all trees
- #19 ((obstructive\* near/3 jaundice) or (post-hepatic near/3 jaundice) or (post hepatic near/3 jaundice)):ti,ab,kw (Word variations have been searched)
- #20 MeSH descriptor: [Cholangitis] explode all trees
- #21 (cholangitis or (bil\* near/3 inflam\*)):ti,ab,kw (Word variations have been searched)
- #22 MeSH descriptor: [Heart] explode all trees
- #23 MeSH descriptor: [Pain] explode all trees
- #24 #22 and #23
- #25 ((heart or cardiac) near/3 pain\*):ti,ab,kw (Word variations have been searched)
- #26 #8 or #9 or #10 or #11 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #24 or #25
- #27 #7 and #26
- #28 sensitiv\* or diagnos\*:ti,ab,kw (Word variations have been searched)
- #29 Any MeSH descriptor with qualifier(s): [Diagnosis - DI]
- #30 incidence:ti,ab,kw (Word variations have been searched)
- #31 MeSH descriptor: [Mortality] explode all trees
- #32 follow-up studies or prognos\* or predict\* or course\*:ti,ab,kw (Word variations have been searched)
- #33 #28 or #29 or #30 or #31 or #32
- #34 #27 and #33

## D.2 Search strategy question 2

### Search strategies

**Database:** Medline/ MiP **Dates searched:** 1946 to February 2014

1. exp Cholelithiasis/
2. (cholelithiasis or choledochlithiasis or cholecystolithiasis).tw.
3. (gall stone\$ or gallstone\$).tw.
4. exp Cholecystitis/
5. cholecystitis.tw.
6. ((gall bladder or gallbladder) adj3 inflam\$).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. ((sign\$ or test\$) adj3 murphy\$).tw.
9. exp Hematologic Tests/
10. exp Blood Chemical Analysis/
11. exp Serologic Tests/
12. ((test\$ or analy\$) adj3 blood).tw.
13. ((test\$ or analy\$) adj3 hematolog\$).tw.
14. ((test\$ or analy\$) adj3 haematolog\$).tw.
15. ((test\$ or analy\$) adj3 serolog\$).tw.
16. exp X-Rays/
17. x\$ ra\$.tw.
18. exp Ultrasonography/
19. ultrasonograph\$.tw.
20. exp Tomography, X-Ray Computed/
21. (computer\$ adj3 tomograph\$).tw.
22. (CT adj3 scan\$).tw.
23. ((hepatobiliary or hepato-biliary or HIDA) adj3 scan\$).tw.
24. ((DISIDA or diisopropyl\$) adj3 scan\$).tw.

25. (gall\$ adj3 radionuclide scan\$).tw.
26. ((gall bladder or gallbladder or chole\$) adj3 scintigraph\$).tw.
27. cholescintigraph\$.tw.
28. exp Magnetic Resonance Imaging/
29. magnetic resonance imag\$.tw.
30. ((imag\$ or scan\$) adj3 MRI).tw.
31. ((magnetic adj3 resonance adj3 cholangiopancreatograph\$) or MRCP).tw.
32. exp Cholangiopancreatography, Endoscopic Retrograde/
33. ((endoscopic adj3 retrograde adj3 cholangiopancreatograph\$) or ERCP).tw.
34. di.fs. or Diagnosis/ or diagnos\$.tw.
35. (32 or 33) and 34
36. (or/8-31) or 35
37. exp Cross-Sectional Studies/
38. cross-sectional.tw.
39. exp Cohort Studies/
40. ((cohort adj study) or studies).tw.
41. cohort analy\$.tw.
42. ((follow up adj study) or studies).tw.
43. longitudinal.tw.
44. prospective.tw.
45. retrospective.tw.
46. or/37-45
47. animals/ not humans/
48. 46 not 47
49. Meta-Analysis.pt.
50. Meta-Analysis as Topic/

51. Review.pt.
52. exp Review Literature as Topic/
53. (metaanaly\$ or metanaly\$ or (meta adj2 analy\$)).tw.
54. (review\$ or overview\$).ti.
55. (systematic\$ adj4 (review\$ or overview\$)).tw.
56. ((quantitative\$ or qualitative\$) adj4 (review\$ or overview\$)).tw.
57. ((studies or trial\$) adj1 (review\$ or overview\$)).tw.
58. (integrat\$ adj2 (research or review\$ or literature)).tw.
59. (pool\$ adj1 (analy\$ or data)).tw.
60. (handsearch\$ or (hand adj2 search\$)).tw.
61. (manual\$ adj2 search\$).tw.
62. or/49-61
63. animals/ not humans/
64. 62 not 63
65. Randomized Controlled Trial.pt.
66. Controlled Clinical Trial.pt.
67. Clinical Trial.pt.
68. exp Clinical Trials as Topic/
69. Placebos/
70. Random Allocation/
71. Double-Blind Method/
72. Single-Blind Method/
73. Cross-Over Studies/
74. ((random\$ or control\$ or clinical\$) adj2 (trial\$ or stud\$)).tw.
75. (random\$ adj2 allocat\$).tw.
76. placebo\$.tw.



77. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj (blind\$ or mask\$)).tw.

78. (crossover\$ or (cross adj over\$)).tw.

79. or/65-78

80. animals/ not humans/

81. 79 not 80

82. 48 or 64 or 81

83. 7 and 36 and 82

84. limit 83 to english language

**Database:** Embase **Dates searched:** 1974 to 2014 week 06

Strategy used:

1. exp cholelithiasis/ or bile duct stone/ or cholesterol stone/ or exp common bile duct stone/ or gallstone/ or gallstone formation/ or mirizzi syndrome/

2. (cholelithiasis or choledochlithiasis or cholecystolithiasis).tw.

3. (gall stone\* or gallstone\*).tw.

4. exp cholecystitis/

5. cholecystitis.tw.

6. ((gall bladder or gallbladder) adj3 inflam\*).tw.

7. 1 or 2 or 3 or 4 or 5 or 6

8. ((sign\* or test\*) adj3 murphy\*).tw.

9. exp blood analysis/

10. exp serology/

11. ((test\* or analy\*) adj3 blood).tw.

12. ((test\* or analy\*) adj3 hematolog\*).tw.
13. ((test\* or analy\*) adj3 haemotolog\*).tw.
14. ((test\* or analy\*) adj3 serolog\*).tw.
15. exp X ray/
16. x\* ra\*.tw.
17. exp echography/
18. ultrasonograph\*.tw.
19. exp computer assisted tomography/
20. (computer\* adj3 tomograph\*).tw.
21. (CT adj3 scan\*).tw.
22. ((hepatobiliary or hepato-biliary or HIDA) adj3 scan\*).tw.
23. ((DISIDA or diisopropyl\*) adj3 scan\*).tw.
24. (gall\* adj3 radionuclide scan\*).tw.
25. ((gall bladder or gallbladder or chole\*) adj3 scintigraph\*).tw.
26. cholescintigraph\*.tw.
27. exp nuclear magnetic resonance imaging/
28. magnetic resonance imag\*.tw.
29. ((imag\* or scan\*) adj3 MRI).tw.
30. ((magnetic adj3 resonance adj3 cholangiopancreatograph\*) or MRCP).tw.
31. exp endoscopic retrograde cholangiopancreatography/
32. ((endoscopic adj3 retrograde adj3 cholangiopancreatograph\*) or ERCP).tw.
33. diagnosis/
34. diagnos\*.tw. or di.fs.
35. 31 or 32
36. 33 or 34
37. 35 and 36

38. 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 37
39. exp cross-sectional study/
40. cross-sectional.tw.
41. exp cohort analysis/
42. ((cohort adj study) or studies).tw.
43. cohort analy\*.tw.
44. ((follow up adj study) or studies).tw.
45. (longitudinal or prospective or retrospective).tw.
46. 39 or 40 or 41 or 42 or 43 or 44 or 45
47. animals/ not humans/
48. 46 not 47
49. Systematic Review/
50. Meta Analysis/
51. (metaanaly\$ or metanaly\$ or (meta adj2 analy\$)).tw.
52. (systematic\$ adj4 (review\$ or overview\$)).tw.
53. ((quantitative\$ or qualitative\$) adj4 (review\$ or overview\$)).tw.
54. ((studies or trial\$) adj1 (review\$ or overview\$)).tw.
55. (integrat\$ adj2 (research or review\$ or literature)).tw.
56. (pool\$ adj1 (analy\$ or data)).tw.
57. (handsearch\$ or (hand adj2 search\$)).tw.
58. (manual\$ adj2 search\$).tw.
59. or/49-58
60. nonhuman/ not human/
61. 59 not 60
62. exp Clinical Trials/

63. Randomization/
64. Placebo/
65. Double Blind Procedure/
66. Single Blind Procedure/
67. Crossover Procedure/
68. ((random\$ or control\$ or clinical\$) adj2 (trial\$ or stud\$)).tw.
69. (random\$ adj2 allocat\$).tw.
70. placebo\$.tw.
71. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj (blind\$ or mask\$)).tw.
72. (crossover\$ or (cross adj over\$)).tw.
73. or/62-72
74. nonhuman/ not human/
75. 73 not 74
76. 61 or 75
77. 48 or 76
78. 7 and 38 and 77
79. limit 78 to english language

**Database:** Cochrane/Wiley **Dates searched:** to February 2014

Strategy used:

- #1 MeSH descriptor: [Cholelithiasis] explode all trees
- #2 "cholelithiasis":ti,ab,kw (Word variations have been searched)
- #3 "gall stone" or "gall stones" or gallstone\*:ti,ab,kw (Word variations have been searched)

- #4 MeSH descriptor: [Cholecystitis] explode all trees
- #5 cholecystitis:ti,ab,kw (Word variations have been searched)
- #6 ((gallbladder or "gall bladder") near/3 inflam\*):ti,ab,kw (Word variations have been searched)
- #7 #1 or #2 or #3 or #4 or #5 or #6
- #8 murphy\* near/3 test\*:ti,ab,kw
- #9 MeSH descriptor: [Hematologic Tests] explode all trees
- #10 MeSH descriptor: [Blood Chemical Analysis] explode all trees
- #11 MeSH descriptor: [Serologic Tests] explode all trees
- #12 ((test\* or analy\*) near/3 blood):ti,ab,kw (Word variations have been searched)
- #13 ((test\* or analy\*) near/3 (hematolog\* or haematolog\*)):ti,ab,kw (Word variations have been searched)
- #14 ((test \* or analy\*) near/3 serolog\*):ti,ab,kw (Word variations have been searched)
- #15 MeSH descriptor: [X-Rays] explode all trees
- #16 x\*ray\*:ti,ab,kw (Word variations have been searched)
- #17 MeSH descriptor: [Ultrasonography] explode all trees
- #18 ultrasonograph\*:ti,ab,kw (Word variations have been searched)
- #19 MeSH descriptor: [Tomography, X-Ray Computed] explode all trees
- #20 computer\* near/3 tomograph\*:ti,ab,kw (Word variations have been searched)
- #21 CT near/3 scan\*:ti,ab,kw (Word variations have been searched)
- #22 ((hepatobiliary or hepato-bilary or HIDA) near/3 scan\*):ti,ab,kw (Word variations have been searched)
- #23 ((DISIDA or diisopropyl\*) near/3 scan\*):ti,ab,kw (Word variations have been searched)
- #24 (gall\* near/3 ("radionuclide scan or radionuclide scans")):ti,ab,kw (Word variations have been searched)
- #25 (("gall bladder" or gallbladder or chole\*) near/3 scintigraph\*):ti,ab,kw (Word variations have been searched)
- #26 cholescintigraph\*:ti,ab,kw (Word variations have been searched)
- #27 MeSH descriptor: [Magnetic Resonance Imaging] explode all trees
- #28 "magnetic resonance imag\*":ti,ab,kw (Word variations have been searched)
- #29 ((imag\* or scan\*) near/3 MRI):ti,ab,kw (Word variations have been searched)
- #30 ((magnetic near/3 resonance near/3 cholangiopancreatograph\*) or MRCP):ti,ab,kw (Word variations have been searched)
- #31 MeSH descriptor: [Cholangiopancreatography, Endoscopic Retrograde] explode all trees

- #32 endoscopic near/3 retrograde near/3 cholangiopancreatograph\*:ti,ab,kw (Word variations have been searched)
- #33 MeSH descriptor: [Diagnosis] this term only
- #34 diagnos\*:ti,ab,kw (Word variations have been searched)
- #35 Any MeSH descriptor with qualifier(s): [Diagnosis - DI]
- #36 #33 or #34 or #35
- #37 #31 or #32
- #38 #36 and #37
- #39 #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #38
- #40 #7 and #39

### D.3 Search strategy question 3

#### Search strategies

**Database:** Medline **Dates searched:** 1946 to February 2014

Strategy used:

1. exp Cholelithiasis/ or Choledocholithiasis/ or Cholecystolithiasis/
2. (cholelithiasis or choledocholithiasis or cholecystolithiasis).tw.
3. (gall stone\* or gallstone\*).tw.
4. exp Cholecystitis/
5. cholecystitis.tw.
6. ((gallbladder or gall bladder) adj4 inflam\*).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. exp Asymptomatic Diseases/
9. (asymptomatic or incidental or silent or ((without or absen\*) adj4 symptom\*)).tw.

10. 8 or 9
11. 7 and 10
12. incidence.sh. or exp mortality/
13. follow-up studies.sh.
14. prognos:.tw.
15. predict:.tw.
16. course:.tw.
17. 12 or 13 or 14 or 15 or 16
18. 7 and 17
19. 11 or 18
20. animals/ not humans/
21. 19 not 20
22. Epidemiologic Studies/
23. exp Case-Control Studies/
24. exp Cohort Studies/
25. Cross-Sectional Studies/
26. Comparative Study.pt.
27. case control\$.tw.
28. case series.tw.
29. (cohort adj (study or studies)).tw.
30. cohort analy\$.tw.
31. (follow up adj (study or studies)).tw.
32. (observational adj (study or studies)).tw.
33. longitudinal.tw.
34. prospective.tw.
35. retrospective.tw.

36. cross sectional.tw.
37. or/22-36
38. animals/ not humans/
39. 37 not 38
40. Meta-Analysis.pt.
41. Meta-Analysis as Topic/
42. Review.pt.
43. exp Review Literature as Topic/
44. (metaanaly\$ or metanaly\$ or (meta adj2 analy\$)).tw.
45. (review\$ or overview\$).ti.
46. (systematic\$ adj4 (review\$ or overview\$)).tw.
47. ((quantitative\$ or qualitative\$) adj4 (review\$ or overview\$)).tw.
48. ((studies or trial\$) adj1 (review\$ or overview\$)).tw.
49. (integrat\$ adj2 (research or review\$ or literature)).tw.
50. (pool\$ adj1 (analy\$ or data)).tw.
51. (handsearch\$ or (hand adj2 search\$)).tw.
52. (manual\$ adj2 search\$).tw.
53. or/40-52
54. animals/ not humans/
55. 53 not 54
56. Randomized Controlled Trial.pt.
57. Controlled Clinical Trial.pt.
58. Clinical Trial.pt.
59. exp Clinical Trials as Topic/
60. Placebos/
61. Random Allocation/



62. Double-Blind Method/
63. Single-Blind Method/
64. Cross-Over Studies/
65. ((random\$ or control\$ or clinical\$) adj2 (trial\$ or stud\$)).tw.
66. (random\$ adj2 allocat\$).tw.
67. placebo\$.tw.
68. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj (blind\$ or mask\$)).tw.
69. (crossover\$ or (cross adj over\$)).tw.
70. or/56-69
71. animals/ not humans/
72. 70 not 71
73. 39 or 55 or 72
74. 21 and 73
75. limit 74 to english language

**Notes:**

Exclusion of terms for prognostic factors discussed and agreed with the analyst.

**Database:** Embase **Dates searched:** 1974 to 2014 week 08

**Strategy used:**

1. exp cholelithiasis/
2. (cholelithiasis or choledocholithiasis or cholecystolithiasis).tw.
3. (gall stone\* or gallstone\*).tw.

4. exp cholecystitis/
5. cholecystitis.tw.
6. ((gallbladder or gall bladder) adj4 inflam\*).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. exp asymptomatic disease/
9. (asymptomatic or incidental or silent or ((without or absen\*) adj4 symptom\*)).tw.
10. 8 or 9
11. 7 and 10
12. exp disease course/
13. risk:.mp.
14. diagnos:.mp.
15. follow-up.mp.
16. ep.fs.
17. outcome.tw.
18. 12 or 13 or 14 or 15 or 16 or 17
19. 7 and 18
20. 11 or 19
21. Nonhuman/ not Human/
22. 20 not 21
23. Clinical study/
24. Case control study/
25. Family study/
26. Longitudinal study/
27. Retrospective study/
28. comparative study/
29. Prospective study/

30. Randomized controlled trials/
31. 29 not 30
32. Cohort analysis/
33. cohort analy\$.tw.
34. (Cohort adj (study or studies)).tw.
35. (Case control\$ adj (study or studies)).tw.
36. (follow up adj (study or studies)).tw.
37. (observational adj (study or studies)).tw.
38. (epidemiologic\$ adj (study or studies)).tw.
39. (cross sectional adj (study or studies)).tw.
40. case series.tw.
41. prospective.tw.
42. retrospective.tw.
43. or/23-28,31-42
44. Nonhuman/ not Human/
45. 43 not 44
46. exp Clinical Trials/
47. Randomization/
48. Placebo/
49. Double Blind Procedure/
50. Single Blind Procedure/
51. Crossover Procedure/
52. ((random\$ or control\$ or clinical\$) adj2 (trial\$ or stud\$)).tw.
53. (random\$ adj2 allocat\$).tw.
54. placebo\$.tw.
55. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj (blind\$ or mask\$)).tw.

56. (crossover\$ or (cross adj over\$)).tw.
57. or/46-56
58. nonhuman/ not human/
59. 57 not 58
60. Systematic Review/
61. Meta Analysis/
62. Review/
63. Review.pt.
64. (metaanaly\$ or metanaly\$ or (meta adj2 analy\$)).tw.
65. (review\$ or overview\$).ti.
66. (systematic\$ adj4 (review\$ or overview\$)).tw.
67. ((quantitative\$ or qualitative\$) adj4 (review\$ or overview\$)).tw.
68. ((studies or trial\$) adj1 (review\$ or overview\$)).tw.
69. (integrat\$ adj2 (research or review\$ or literature)).tw.
70. (pool\$ adj1 (analy\$ or data)).tw.
71. (handsearch\$ or (hand adj2 search\$)).tw.
72. (manual\$ adj2 search\$).tw.
73. or/60-72
74. nonhuman/ not human/
75. 73 not 74
76. 45 or 59 or 75
77. 22 and 76
78. limit 77 to embase
79. limit 78 to (conference abstract or conference paper)
80. 78 not 79
81. limit 80 to english language

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**Notes:**

As above for prognostic factors

**Database:** Cochrane/Wiley **Dates searched:** to February 2014

Strategy used:

- #1 MeSH descriptor: [Cholelithiasis] explode all trees
- #2 cholelithiasis or choledocholithiasis or cholecystolithiasis:ti,ab,kw (Word variations have been searched)
- #3 gall stone\* or gallstone\*:ti,ab,kw (Word variations have been searched)
- #4 MeSH descriptor: [Cholecystitis] explode all trees
- #5 cholecystitis:ti,ab,kw (Word variations have been searched)
- #6 ((gallbladder or gall bladder) near/4 inflam\*):ti,ab,kw (Word variations have been searched)
- #7 #1 or #2 or #3 or #4 or #5 or #6
- #8 MeSH descriptor: [Asymptomatic Diseases] explode all trees
- #9 (asymptomatic or incidental or silent or ((without or absen\*) near/4 symptom\*)):ti,ab,kw (Word variations have been searched)
- #10 #8 or #9
- #11 #7 and #10
- #12 MeSH descriptor: [Mortality] explode all trees
- #13 incidence or follow-up studies or prognos\* or predict\* or course\*:ti,ab,kw (Word variations have been searched)
- #14 #12 or #13
- #15 #14 and #7
- #16 #15 or #11

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<b>Notes:</b>
Filters not used

## D.4 Search strategy question 4 & 5

### Search strategies

<b>Database:</b> Medline/MiP <b>Dates searched:</b> 1946 to February 2014
1. exp Cholelithiasis/ or Choledocholithiasis/ or exp Cholecystitis/ or Cholecystolithiasis/ 2. exp Cholecystitis/ 3. (gall stone* or gallstone*).tw. 4. ((gallbladder or gall bladder) adj4 inflam*).tw. 5. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis).tw. 6. 1 or 2 or 3 or 4 or 5 7. exp Gallbladder/su or exp Bile Ducts/su 8. exp Biliary Tract Surgical Procedures/ 9. Bile Ducts/ or Common Bile Duct/ or Biliary Tract/ or exp Pancreatic Ducts/ 10. exp Laparoscopy/ or Endoscopy/ or exp Stents/ or exp Drainage/ or exp Biliary Tract/us 11. 9 and 10 12. ((bile duct* or biliary tract or pancreatic duct*) adj4 (laparoscop* or endoscop* or stent* or drain* or ultraso* or celioscop*)).tw. 13. exp Cholecystectomy/ 14. cholecystectom*.tw. 15. choledochoscop*.tw. 16. exp Cholangiography/ or Cholecystography/

17. (cholangiogra\* or cholecystograph\*).tw.
18. (bile duct \* adj4 explor\*).tw.
19. ((endoscopic adj1 retrograde adj1 cholangiopancreatograph\*) or ercp).tw.
20. (balloon sphincteroplast\* or transduodenal sphinteroplast\* or ts).tw.
21. exp Lithotripsy/
22. lithotripsy.tw.
23. Cholecystostomy/
24. cholecystostom\*.tw.
25. (percutaneous adj4 biliary intervention\*).tw.
26. (pthc or ptc).tw.
27. Sphincterotomy ,Endoscopic/
28. (endoscop\* adj4 (sphincterotom\* or papilllotom\*)).tw.
29. Sphincterotomy, Transhepatic/
30. ((transhepatic or transduodenal) adj4 (sphinctertom\* or sphincteroplast\*)).tw.
31. transampullary septectom\*.tw.
32. exp Ursodeoxycholic Acid/
33. ((ursodeoxychol\* adj1 acid) or ursodiol or ((dissolve\* adj4 therap) or treat\*)).tw.
34. exp Anti-Bacterial Agents/
35. antibiotic\*.tw.
36. exp Analgesics/
37. analgesic\*.tw.
38. Watchful Waiting/
39. (watch\* adj2 wait\*).tw.
40. 7 or 8 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39
41. 6 and 40

42. Randomized Controlled Trial.pt.
43. Controlled Clinical Trial.pt.
44. Clinical Trial.pt.
45. exp Clinical Trials as Topic/
46. Placebos/
47. Random Allocation/
48. Double-Blind Method/
49. Single-Blind Method/
50. Cross-Over Studies/
51. ((random\$ or control\$ or clinical\$) adj2 (trial\$ or stud\$)).tw.
52. (random\$ adj2 allocat\$).tw.
53. placebo\$.tw.
54. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj (blind\$ or mask\$)).tw.
55. (crossover\$ or (cross adj over\$)).tw.
56. or/42-55
57. animals/ not humans/
58. 56 not 57
59. limit 58 to english language
60. Epidemiologic Studies/
61. exp Case-Control Studies/
62. exp Cohort Studies/
63. Cross-Sectional Studies/
64. Comparative Study.pt.
65. case control\$.tw.
66. case series.tw.
67. (cohort adj (study or studies)).tw.



68. cohort analy\$.tw.
69. (follow up adj (study or studies)).tw.
70. (observational adj (study or studies)).tw.
71. longitudinal.tw.
72. prospective.tw.
73. retrospective.tw.
74. cross sectional.tw.
75. or/60-74
76. animals/ not humans/
77. 75 not 76
78. limit 77 to english language
79. Meta-Analysis.pt.
80. Meta-Analysis as Topic/
81. Review.pt.
82. exp Review Literature as Topic/
83. (metaanaly\$ or metanaly\$ or (meta adj2 analy\$)).tw.
84. (review\$ or overview\$).ti.
85. (systematic\$ adj4 (review\$ or overview\$)).tw.
86. ((quantitative\$ or qualitative\$) adj4 (review\$ or overview\$)).tw.
87. ((studies or trial\$) adj1 (review\$ or overview\$)).tw.
88. (integrat\$ adj2 (research or review\$ or literature)).tw.
89. (pool\$ adj1 (analy\$ or data)).tw.
90. (handsearch\$ or (hand adj2 search\$)).tw.
91. (manual\$ adj2 search\$).tw.
92. or/79-91
93. animals/ not humans/

94. 92 not 93

95. limit 94 to english language

96. 59 or 78 or 95

97. 41 and 96

**Notes:**

Results will be downloaded into two Ref Man databases; one containing the RCTs and SRS and the other the observational studies.

**Database:** Embase **Dates searched:** 1974 to 2014 week 08

Strategy used:

1. exp cholelithiasis/
2. exp common bile duct stone/
3. exp cholecystitis/
4. (gall stone\* or gallstone\*).tw.
5. ((gallbladder or gall bladder) adj4 inflam\*).tw.
6. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. exp gallbladder/su [Surgery]
9. exp bile duct/su [Surgery]
10. exp biliary tract surgery/
11. bile duct/
12. common bile duct/
13. hepatobiliary system/

14. pancreas duct/
15. 11 or 12 or 13 or 14
16. exp laparoscopy/
17. endoscopy/
18. exp stent/
19. exp biliary tract drainage/
20. 16 or 17 or 18 or 19
21. 15 and 20
22. ((bile duct\* or biliary tract or pancreatic duct\*) adj4 (laparoscop\* or endoscop\* or stent\* or drain\* or ultraso\* or celioscop\*)).tw.
23. exp cholecystectomy/
24. cholecystectom\*.tw.
25. exp biliary tract endoscopy/
26. choledochoscop\*.tw.
27. exp cholangiography/
28. exp cholecystography/
29. (cholangiogra\* or cholecystograph\*).tw.
30. (bile duct \* adj4 explor\*).tw.
31. ((endoscopic adj1 retrograde adj1 cholangiopancreatograph\*) or ercp).tw.
32. (balloon sphincteroplast\* or transduodenal sphinteroplast\* or ts).tw.
33. exp lithotripsy/
34. lithotripsy.tw.
35. exp cholecystostomy/
36. cholecystostom\*.tw.
37. (percutaneous adj4 biliary intervention\*).tw.
38. (pthc or ptc).tw.

39. exp endoscopic sphincterotomy/
40. (endoscop\* adj4 (sphincterotom\* or papilllotom\*)).tw.
41. ((transhepatic or transduodenal) adj4 (sphinctertom\* or sphincteroplast\*)).tw.
42. exp vater papillotomy/
43. transampullary septectom\*.tw.
44. exp ursodeoxycholic acid/
45. ((ursodeoxychol\* adj1 acid) or ursodiol or ((dissolve\* adj4 therap) or treat\*)).tw.
46. exp antibiotic agent/
47. antibiotic\*.tw.
48. exp analgesic agent/
49. analgesic\*.tw.
50. Watchful Waiting/
51. (watch\* adj2 wait\*).tw.
52. 8 or 9 or 10 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51
53. 7 and 52
54. nonhuman/ not human/
55. 53 not 54
56. Clinical study/
57. Case control study/
58. Family study/
59. Longitudinal study/
60. Retrospective study/
61. comparative study/
62. Prospective study/
63. Randomized controlled trials/

64. 62 not 63
65. Cohort analysis/
66. cohort analy\$.tw.
67. (Cohort adj (study or studies)).tw.
68. (Case control\$ adj (study or studies)).tw.
69. (follow up adj (study or studies)).tw.
70. (observational adj (study or studies)).tw.
71. (epidemiologic\$ adj (study or studies)).tw.
72. (cross sectional adj (study or studies)).tw.
73. case series.tw.
74. prospective.tw.
75. retrospective.tw.
76. or/56-61,64-75
77. Nonhuman/ not Human/
78. 76 not 77
79. exp Clinical Trials/
80. Randomization/
81. Placebo/
82. Double Blind Procedure/
83. Single Blind Procedure/
84. Crossover Procedure/
85. ((random\$ or control\$ or clinical\$) adj2 (trial\$ or stud\$)).tw.
86. (random\$ adj2 allocat\$).tw.
87. placebo\$.tw.
88. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj (blind\$ or mask\$)).tw.
89. (crossover\$ or (cross adj over\$)).tw.

90. or/79-89
91. nonhuman/ not human/
92. 90 not 91
93. Systematic Review/
94. Meta Analysis/
95. Review/
96. Review.pt.
97. (metaanaly\$ or metanaly\$ or (meta adj2 analy\$)).tw.
98. (review\$ or overview\$).ti.
99. (systematic\$ adj4 (review\$ or overview\$)).tw.
100. ((quantitative\$ or qualitative\$) adj4 (review\$ or overview\$)).tw.
101. ((studies or trial\$) adj1 (review\$ or overview\$)).tw.
102. (integrat\$ adj2 (research or review\$ or literature)).tw.
103. (pool\$ adj1 (analy\$ or data)).tw.
104. (handsearch\$ or (hand adj2 search\$)).tw.
105. (manual\$ adj2 search\$).tw.
106. or/93-105
107. nonhuman/ not human/
108. 106 not 107
109. 78 or 92 or 108
110. 55 and 109
111. limit 110 to embase
112. limit 111 to (conference abstract or conference paper)
113. 111 not 112
114. limit 113 to english language



**Notes:**

Results will be downloaded into two Ref Man databases; one containing the RCTs and SRS and the other the observational studies.

**Database:** Cochrane/Wiley **Dates searched:** to February 2014

Strategy used:

- #1 MeSH descriptor: [Cholelithiasis] explode all trees
- #2 MeSH descriptor: [Choledocholithiasis] explode all trees
- #3 MeSH descriptor: [Cholecystitis] explode all trees
- #4 MeSH descriptor: [Cholecystolithiasis] explode all trees
- #5 #1 or #2 or #3 or #4
- #6 gall stone\* or gallstone\*:ti,ab,kw (Word variations have been searched)
- #7 ((gallbladder or gall bladder) near/4 inflam\*) .:ti,ab,kw (Word variations have been searched)
- #8 cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis:ti,ab,kw (Word variations have been searched)
- #9 #5 or #6 or #7 or #8
- #10 MeSH descriptor: [Gallbladder] explode all trees and with qualifiers: [Surgery - SU]
- #11 MeSH descriptor: [Bile Ducts] explode all trees and with qualifiers: [Surgery - SU]
- #12 MeSH descriptor: [Biliary Tract Surgical Procedures] explode all trees
- #13 MeSH descriptor: [Bile Ducts] explode all trees
- #14 MeSH descriptor: [Common Bile Duct] explode all trees
- #15 MeSH descriptor: [Biliary Tract] explode all trees
- #16 MeSH descriptor: [Pancreatic Ducts] explode all trees
- #17 #13 or #14 or #15 or #16
- #18 MeSH descriptor: [Laparoscopy] explode all trees

- #19 MeSH descriptor: [Endoscopy] explode all trees
- #20 MeSH descriptor: [Stents] explode all trees
- #21 MeSH descriptor: [Drainage] explode all trees
- #22 MeSH descriptor: [Biliary Tract] explode all trees and with qualifiers: [Ultrasonography - US]
- #23 #18 or #19 or #20 or #21 or #22
- #24 #17 and #23
- #25 ((bile duct\* or biliary tract or pancreatic duct\*) near/4 (laparoscop\* or endoscop\* or stent\* or drain\* or ultraso\* or celioscop\*)):ti,ab,kw (Word variations have been searched)
- #26 MeSH descriptor: [Cholecystectomy] explode all trees
- #27 cholecystectom\* or choledochoscop\*:ti,ab,kw (Word variations have been searched)
- #28 MeSH descriptor: [Cholangiography] explode all trees
- #29 MeSH descriptor: [Cholecystography] explode all trees
- #30 cholangiogra\* or cholecystograph\*:ti,ab,kw (Word variations have been searched)
- #31 (bile duct \* near/4 explor\*):ti,ab,kw (Word variations have been searched)
- #32 ((endoscopic near/1 retrograde near/1 cholangiopancreatograph\*) or ercp):ti,ab,kw (Word variations have been searched)
- #33 (balloon sphincteroplast\* or transduodenal sphinteroplast\* or ts):ti,ab,kw (Word variations have been searched)
- #34 MeSH descriptor: [Lithotripsy] explode all trees
- #35 lithotripsy:ti,ab,kw (Word variations have been searched)
- #36 MeSH descriptor: [Cholecystostomy] explode all trees
- #37 cholecystostom\*:ti,ab,kw (Word variations have been searched)
- #38 (percutaneous near/4 biliary intervention\*):ti,ab,kw (Word variations have been searched)
- #39 pthc or ptc.:ti,ab,kw (Word variations have been searched)
- #40 MeSH descriptor: [Sphincterotomy, Endoscopic] explode all trees
- #41 (endoscop\* near/4 (sphincterotom\* or papilllotom\*)):ti,ab,kw (Word variations have been searched)
- #42 MeSH descriptor: [Sphincterotomy, Transhepatic] explode all trees
- #43 ((transhepatic or transduodenal) near/4 (sphinctertom\* or sphincteroplast\*)) .:ti,ab,kw (Word variations have been searched)
- #44 transampullary septectom\*.:ti,ab,kw (Word variations have been searched)
- #45 MeSH descriptor: [Ursodeoxycholic Acid] explode all trees
- #46 ((ursodeoxychol\* near/1 acid) or ursodiol or ((dissolve\* near/4 therap) or treat\*)) .:ti,ab,kw (Word variations have been searched)



#47	MeSH descriptor: [Anti-Bacterial Agents] explode all trees
#48	antibiotic*:ti,ab,kw (Word variations have been searched)
#49	MeSH descriptor: [Analgesics] explode all trees
#50	analgesic*:ti,ab,kw (Word variations have been searched)
#51	(watch* near/2 wait*):ti,ab,kw (Word variations have been searched)
#52	MeSH descriptor: [Watchful Waiting] explode all trees
#53	#10 or #11 or #12 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52
#54	#9 and #53

## D.5 Search strategy question 6

### Search strategies

<b>Database:</b> Medline <b>Dates searched:</b> 1946 to February 2014
<p>Strategy used:</p> <ol style="list-style-type: none"> <li>1. exp Cholelithiasis/ or Choledocholithiasis/ or exp Cholecystitis/ or Cholecystolithiasis/</li> <li>2. ((gallbladder or gall bladder) adj4 inflam*).tw.</li> <li>3. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis or gall stone* or gallstone*).tw.</li> <li>4. exp Gallbladder/su or exp Bile Ducts/su</li> <li>5. exp Biliary Tract Surgical Procedures/</li> <li>6. exp Cholecystectomy/</li> <li>7. (cholecystectom* or ((gallbladder or gall bladder) adj4 remov*)).tw.</li> <li>8. 1 or 2 or 3 or 4 or 5 or 6 or 7</li> <li>9. Qualitative Research/</li> <li>10. Nursing Methodology Research/</li> <li>11. exp Interviews as topic/</li> <li>12. Questionnaires/</li> <li>13. Narration/</li> <li>14. Health Care Surveys/</li> <li>15. (qualitative\$ or interview\$ or focus group\$ or questionnaire\$ or narrative\$ or narration\$ or survey\$).tw.</li> <li>16. (ethno\$ or emic or etic or phenomenolog\$ or grounded theory or constant compar\$ or (thematic\$ adj3 analys\$) or theoretical sampl\$ or purposive sampl\$).tw.</li> <li>17. (hermeneutic\$ or heidegger\$ or husserl\$ or colaizzi\$ or van kaam\$ or van manen\$ or giorgi\$ or glaser\$ or</li> </ol>

straus\$ or ricoeur\$ or spiegelberg\$ or merleau\$).tw.

18. (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$ or metathem\$ or meta-them\$).tw.

19. or/9-18

20. exp Patients/px

21. exp Family/px

22. Caregivers/px

23. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$) adj5 (experience\$ or belief\$ or stress\$ or emotion\$ or anx\$ or fear\$ or concern\$ or uncertain\$ or unsure or thought\$ or feeling\$ or felt\$ or view\$ or opinion\$ or perception\$ or perspective\$ or attitud\$ or satisfact\$ or know\$ or understand\$ or aware\$)).ti.

24. Stress, Psychological/

25. Adaptation, psychological/

26. Emotions/

27. Anxiety/

28. Fear/

29. exp Consumer Satisfaction/

30. patient\$ report\$ outcome\$.tw.

31. or/20-30

32. exp Patients/

33. exp Family/

34. Caregivers/

35. (patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$).ti.

36. or/32-35

37. Pamphlets/

38. Needs Assessment/

39. Information Centers/

40. Information Services/

41. Health Education/

42. Information Dissemination/

43. Counseling/

44. Social Support/

45. Self-Help Groups/

46. Self Care/

47. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj5 (educat\$ or informat\$ or communicat\$ or pamphlet\$ or handout\$ or hand-out\$ or hand out\$ or booklet\$ or leaflet\$ or support\$ or need\$ or advice\$ or advis\$)).ti.

48. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj5 (counsel\$ or selfhelp\$ or self-help\$ or self help\$ or selfcar\$ or self-car\$ or self car\$)).ti.
49. Patient Education as Topic/
50. Patient Education Handout/
51. Consumer Health Information/
52. patient\* diar\*.tw.
53. or/37-52
54. 36 and 53
55. 19 or 31 or 54
56. Animals/ not Humans/
57. 55 not 56
58. 8 and 57
59. limit 58 to english language

**Database:** Medline in process **Dates searched:** to February 2014

**Strategy used:**

1. exp Cholelithiasis/ or Choledocholithiasis/ or exp Cholecystitis/ or Cholecystolithiasis/
2. ((gallbladder or gall bladder) adj4 inflam\*).tw.
3. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis or gall stone\* or gallstone\*).tw.
4. exp Gallbladder/su or exp Bile Ducts/su
5. exp Biliary Tract Surgical Procedures/
6. exp Cholecystectomy/
7. (cholecystectom\* or ((gallbladder or gall bladder) adj4 remov\*)).tw.
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. (qualitative\$ or interview\$ or focus group\$ or questionnaire\$ or narrative\$ or narration\$ or survey\$).tw.
10. (ethno\$ or emic or etic or phenomenolog\$ or grounded theory or constant compar\$ or (thematic\$ adj3 analys\$) or theoretical sampl\$ or purposive sampl\$).tw.
11. (hermeneutic\$ or heidegger\$ or husser\$ or colaizzi\$ or van kaam\$ or van manen\$ or giorgi\$ or glaser\$ or strauss\$ or ricoeur\$ or spiegelberg\$ or merleau\$).tw.
12. (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$ or metathem\$ or meta-them\$).tw.
13. or/9-12
14. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or in-patient\$ or spouse\$ or husband\$ or wife\$ or wives\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or

- brother\$) adj5 (experience\$ or belief\$ or stress\$ or emotion\$ or anx\$ or fear\$ or concern\$ or uncertain\$ or unsure or thought\$ or feeling\$ or felt\$ or view\$ or opinion\$ or perception\$ or perspective\$ or attitud\$ or satisfact\$ or know\$ or understand\$ or aware\$)).tw.
15. patient\$ report\$ outcome\$.tw.
16. (patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or inpatient\$ or spouse\$ or husband\$ or wife\$ or wives\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$).tw.
17. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj5 (educat\$ or informat\$ or communicat\$ or pamphlet\$ or handout\$ or hand-out\$ or hand out\$ or booklet\$ or leaflet\$ or support\$ or need\$ or advice\$ or advis\$)).ti.
18. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj5 (counsel\$ or selfhelp\$ or self-help\$ or self help\$ or selfcar\$ or self-car\$ or self car\$)).ti.
19. patient\* diar\*.tw.
20. or/17-19
21. 16 and 20
22. 13 or 14 or 15 or 21
23. 8 and 22
24. limit 23 to english language

**Database:** Embase **Dates searched:** 1974 to February 2014

**Strategy used:**

1. exp cholelithiasis/
2. exp common bile duct stone/
3. exp cholecystitis/
4. ((gallbladder or gall bladder) adj4 inflam\*).tw.
5. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis or gall stone\* or gallstone\*).tw.
6. exp gallbladder/su [Surgery]
7. exp bile duct/su [Surgery]
8. exp biliary tract surgery/
9. exp cholecystectomy/
10. (cholecystectom\* or ((gallbladder or gall bladder) adj4 remov\*)).tw.
11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12. Qualitative Research/
13. exp Interview/
14. exp Questionnaire/

15. exp Observational Method/
16. Narrative/
17. (qualitative\$ or interview\$ or focus group\$ or questionnaire\$ or narrative\$ or narration\$ or survey\$).tw.
18. (ethno\$ or emic or etic or phenomenolog\$ or grounded theory or constant compar\$ or (thematic\$ adj3 analys\$) or theoretical sampl\$ or purposive sampl\$).tw.
19. (hermeneutic\$ or heidegger\$ or husser\$ or colaizzi\$ or van kaam\$ or van manen\$ or giorgi\$ or glaser\$ or strauss\$ or ricoeur\$ or spiegelberg\$ or merleau\$).tw.
20. (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$ or metathem\$ or meta-them\$).tw.
21. or/12-20
22. exp parent/
23. exp family/
24. caregiver/
25. exp Patient/
26. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or in-patient\$ or spouse\$ or husband\$ or wife\$ or wives\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$) adj5 (experience\$ or belief\$ or stress\$ or emotion\$ or anx\$ or fear\$ or concern\$ or uncertain\$ or unsure or thought\$ or feeling\$ or felt\$ or view\$ or opinion\$ or perception\$ or perspective\$ or attitud\$ or satisfact\$ or know\$ or understand\$ or aware\$)).tw.
27. exp Patient Attitude/
28. EMOTION/
29. FEAR/
30. Anxiety/
31. exp family attitude/
32. Mental Stress/
33. Adaptive Behavior/
34. Consumer/
35. patient\$ report\$ outcome\$.tw.
36. or/22-35
37. exp parent/
38. exp family/
39. caregiver/
40. exp Patient/
41. (patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or in-patient\$ or spouse\$ or husband\$ or wife\$ or wives\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$).tw.
42. or/37-41
43. publication/
44. needs assessment/

45. information center/
46. information service/
47. health education/
48. information dissemination/
49. exp counseling/
50. social support/
51. self help/
52. self care/
53. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj5 (educat\$ or informat\$ or communicat\$ or pamphlet\$ or handout\$ or hand-out\$ or hand out\$ or booklet\$ or leaflet\$ or support\$ or need\$ or advice\$ or advis\$)).ti.
54. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj5 (counsel\$ or selfhelp\$ or self-help\$ or self help\$ or selfcar\$ or self-car\$ or self car\$)).ti.
55. patient education/
56. consumer health information/
57. patient\* diar\*.tw.
58. or/43-57
59. 42 and 58
60. 21 or 36 or 59
61. 11 and 60
62. nonhuman/ not human/
63. 61 not 62
64. limit 63 to embase
65. limit 64 to (conference abstract or conference paper)
66. 64 not 65
67. limit 66 to english language

**Database:** Cochrane (Wiley) **Dates searched:** to February 2014

Strategy used:

- | ID | Search   |
|----|--|
| #1 | MeSH descriptor: [Cholelithiasis] explode all trees  |
| #2 | MeSH descriptor: [Choledocholithiasis] explode all trees                                     |
| #3 | MeSH descriptor: [Cholecystitis] explode all trees   |
| #4 | MeSH descriptor: [Cholecystolithiasis] explode all trees                                     |
| #5 | (gallbladder or gall bladder) near/4 inflam*:ti,ab,kw (Word variations have been searched)   |
| #6 | cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis or gall stone* |

or gallstone\*:ti,ab,kw (Word variations have been searched)

#7 MeSH descriptor: [Gallbladder] explode all trees and with qualifiers: [Surgery - SU]

#8 MeSH descriptor: [Bile Ducts] explode all trees and with qualifiers: [Surgery - SU]

#9 MeSH descriptor: [Biliary Tract Surgical Procedures] explode all trees

#10 MeSH descriptor: [Cholecystectomy] explode all trees

#11 cholecystectom\* or ((gallbladder or gall bladder) near/4 remov\*):ti,ab,kw (Word variations have been searched)

#12 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11

#13 ethno\* or emic or etic or phenomenology\* or grounded theory or constant compare\* or (thematic\* near/4 analys\*) or theoretical sampl\* or purposive sampl\*:ti,ab,kw (Word variations have been searched)

#14 qualitative\* or interview\* or focus group\* or questionnaire\* or narrative\* or narration\* or survey\*:ti,ab,kw (Word variations have been searched)

#15 hermeneutic\* or Heidegger\* or husser\* or colaizzi\* or van kaam\* or van manen\* or giorgi\* or glaser\* or strauss\* or ricoeur\* or spiegelberg\* or merleau\*:ti,ab,kw (Word variations have been searched)

#16 metasyntes\* or meta-syntes\* or metasummar\* or meta-summar\* or metastud\* or meta-stud\* or metathem\* or meta-them\*:ti,ab,kw (Word variations have been searched)

#17 #13 or #14 or #15 or #16

#18 (patient\* or parent\* or famil\* or relative\* or carer\* or caregiver\* or care-giver\* or inpatient\* or in-patient\* or spouse\* or husband\* or wife\* or wives\* or partner\* or mother\* or father\* or sibling\* or sister\* or brother\*) near/6 (experience\* or belief\* or stress\* or emotion\* or anx\* or fear\* or concern\* or uncertain\* or unsure or thought\* or feeling\* or felt\* or view\* or opinion\* or perception\* or perspective\* or attitude\* or satisfact\* or know\* or understand\* or aware):ti,ab,kw (Word variations have been searched)

#19 patient\* or parent\* or famil\* or relative\* or carer\* or caregiver\* or care-giver\* or inpatient\* or in-patient\* or spouse\* or husband\* or wife\* or wives\* or partner\* or mother\* or father\* or sibling\* or sister\* or brother:ti,ab,kw (Word variations have been searched)

#20 (patient\* or parent\* or famil\* or relative\* or carer\* or caregiver\* or care-giver\* or spous\* or husband\* or wife\* or wive\* or partner\*) near/6 (educat\* or informat\* or communicat\* or pamphlet\* or handout\* or hand-out\* or hand out\* or booklet\* or leaflet\* or support\* or need\* or advice\* or advis\*):ti (Word variations have been searched)

#21 (patient\* or parent\* or famil\* or relative\* or carer\* or caregiver\* or care-giver\* or spous\* or husband\* or wife\* or wive\* or partner\*) near/6 (counsel\* or selfhelp\* or self-help\* or self help\* or selfcar\* or self-car\* or self car\*):ti (Word variations have been searched)

#22 patient\* diar\*:ti,ab,kw (Word variations have been searched)

#23 #20 or #21 or #22

#24 #19 and #23

#25 #17 or #18 or #24

#26 #12 and #25

**Notes:**

Cochrane patient education and information terms taken from a previous Guideline

## D.6 Search strategy population

### Search strategies

**Database:** Pubmed **Dates searched:** to 26<sup>th</sup> February 2014

Search	Query
#10	Search (#8 OR #9)
#9	Search (#5 AND #7)
#8	Search (#5 AND #6)
#7	Search "2014/02/22"[Date - Entrez] : "3000"[Date - Entrez]
#6	Search publisher[sb]
#5	Search (#1 OR #2 OR #3 OR #4)
#4	Search cholecystectomy*[Title/Abstract]
#3	Search (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis[Title/Abstract])
#2	Search (gallbladder or gall bladder[Title/Abstract])
#1	Search (gall stone* or gallstone*[Title/Abstract])



## D.7 Search strategy – Health Economics Question 1

**Database: Medline** **Dates Searched: 1946 to February week 1 2014**

Strategy used:

1. Economics/
2. exp "Costs and Cost Analysis"/
3. Economics, Dental/
4. exp Economics, Hospital/
5. exp Economics, Medical/
6. Economics, Nursing/
7. Economics, Pharmaceutical/
8. Budgets/
9. exp Models, Economic/
10. Markov Chains/
11. Monte Carlo Method/
12. Decision Trees/
13. econom\$.tw.
14. cba.tw.
15. cea.tw.
16. cua.tw.
17. markov\$.tw.
18. (monte adj carlo).tw.
19. (decision adj2 (tree\$ or analys\$)).tw.
20. (cost or costs or costing\$ or costly or costed).tw.
21. (price\$ or pricing\$).tw.
22. budget\$.tw.
23. expenditure\$.tw.

24. (value adj2 (money or monetary)).tw.
25. (pharmacoeconomic\$ or (pharmacologic\$ or (pharmacologic\$ adj economic\$))).tw.
26. or/1-25
27. exp Cholelithiasis/ or Choledocholithiasis/
28. cholelithiasis.tw.
29. exp Cholecystitis/
30. (gall stone\* or gallstone\*).tw.
31. (cholecystitis or choledocholithiasis or cholecystolithiasis).tw.
32. ((gallbladder or gall bladder) adj3 inflam\*).tw.
33. 27 or 28 or 29 or 30 or 31 or 32
34. exp abdominal pain/
35. ((right upper quadrant adj3 pain\*) or (epigast\* adj3 pain\*) or (abdom\* adj 3 pain\*)).tw.
36. exp dyspepsia/
37. (dyspepsia or indigestion).tw.
38. colic/ and exp biliary tract diseases/
39. (colic adj3 biliary\*).tw.
40. exp pancreatitis/
41. (pancreatitis or (pancrea\* adj3 inflam\*)).tw.
42. jaundice,obstructive/
43. ((obstructive\* adj3 jaundice) or (post-hepatic adj3 jaundice) or (post hepatic adj3 jaundice)).tw.
44. exp cholangitis/
45. (cholangitis or (bil\* adj3 inflam\*)).tw.
46. exp heart/ and exp pain/
47. ((heart or cardiac) adj3 pain\*).tw.
48. or/34-47
49. 48 and 33

50. (sensitiv: or diagnos:).mp. or di.fs.
51. incidence.sh. or exp mortality/
52. follow-up studies.sh. or prognos:.tw. or predict:.tw. or course:.tw.
53. or/50-52
54. 49 and 53
55. animals/ not humans/
56. 54 not 55
57. limit 56 to english language
58. 26 and 57

**Notes:** Use of McMaster diagnosis and prognosis filters discussed with SW.  
NHS EED and HEED searched with population terms

**Database: Embase Dates Searched: 1946 to 2014 week 07**

Strategy used:

1. exp Health Economics/
2. exp "Health Care Cost"/
3. exp Pharmacoeconomics/
4. Monte Carlo Method/
5. Decision Tree/
6. econom\$.tw.
7. cba.tw.
8. cea.tw.
9. cua.tw.
10. markov\$.tw.
11. (monte adj carlo).tw.
12. (decision adj2 (tree\$ or analys\$)).tw.
13. (cost or costs or costing\$ or costly or costed).tw.

14. (price\$ or pricing\$).tw.
15. budget\$.tw.
16. expenditure\$.tw.
17. (value adj2 (money or monetary)).tw.
18. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
19. or/1-18
20. exp \*cholelithiasis/
21. exp \*common bile duct stone/
22. exp \*cholecystitis/
23. (gall stone\* or gallstone\*).tw.
24. (cholelithiasis or cholecystitis or choledocholithiasis or cholecystolithiasis).tw.
25. ((gallbladder or gall bladder) adj3 inflam\*).tw.
26. 20 or 21 or 22 or 23 or 24 or 25
27. exp \*abdominal pain/
28. ((right upper quadrant adj3 pain\*) or (epigast\* adj3 pain\*) or (abdom\* adj 3 pain\*)).tw.
29. exp \*dyspepsia/
30. (dyspepsia or indigestion).tw.
31. exp \*biliary colic/
32. (colic adj3 biliary\*).tw.
33. exp \*pancreatitis/
34. (pancreatitis or (pancrea\* adj3 inflam\*)).tw.
35. exp \*obstructive jaundice/
36. ((obstructive\* adj3 jaundice) or (post-hepatic adj3 jaundice) or (post hepatic adj3 jaundice)).tw.
37. exp \*cholangitis/
38. (cholangitis or (bil\* adj3 inflam\*)).tw.
39. exp \*heart/ and exp \*pain/

40. ((heart or cardiac) adj3 pain\*).tw.
41. exp \*epigastric pain/
42. 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41
43. 26 and 42
44. di.fs. or predict\*.tw. or specificity.tw.
45. exp disease course/ or risk\*.mp. or diagnos\*.mp. or follow-up.mp. or ep.fs. or outcome.tw.
46. 44 or 45
47. 43 and 46
48. Nonhuman/ not Human/
49. 47 not 48
50. limit 49 to (conference abstract or conference paper)
51. 49 not 50
52. limit 51 to english language
53. limit 52 to embase
54. 19 and 53

**Database: EED Dates Searched: 18 Feb 2014**

Strategy used:

- | ID | Search   |
|----|--|
| #1 | MeSH descriptor: [Cholelithiasis] explode all trees  |
| #2 | MeSH descriptor: [Choledocholithiasis] explode all trees   |
| #3 | MeSH descriptor: [Cholecystolithiasis] explode all trees   |
| #4 | MeSH descriptor: [Cholecystitis] explode all trees   |
| #5 | MeSH descriptor: [Cholecystectomy] explode all trees   |
| #6 | cholelithiasis or choledocholithiasis or cholecystolithiasis or cholecystitis or cholecystectom*:ti,ab,kw (Word variations have been searched) |
| #7 | gall stone* or gallstone*:ti,ab,kw (Word variations have been searched)  |
| #8 | ((gallbladder or gall bladder) near/3 inflam*):ti,ab,kw (Word variations have been searched)   |

#9	((gallbladder or gall bladder) near/3 remov*):ti,ab,kw (Word variations have been searched)
#10	MeSH descriptor: [Gallbladder] explode all trees and with qualifiers: [Surgery - SU]
#11	#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10
Notes: Run through Wiley/Cochrane	

<b>Database: HEED Dates Searched: 18 Feb 2014</b>
Strategy used:  Cholecystitis or cholecystectomy* or cholelithiasis or choledocholithiasis or cholecystolithiasis or 'gall bladder' or gallbladder or 'gall stone' or 'gall stones' or gallstone*

## D.8 Search strategy – Health Economics Question 2

<b>Database: Medline Dates Searched: 1946 to February week 1 2014</b>
Strategy used:  <ol style="list-style-type: none"> <li>1. Economics/</li> <li>2. exp "Costs and Cost Analysis"/</li> <li>3. Economics, Dental/</li> <li>4. exp Economics, Hospital/</li> <li>5. exp Economics, Medical/</li> <li>6. Economics, Nursing/</li> <li>7. Economics, Pharmaceutical/</li> <li>8. Budgets/</li> <li>9. exp Models, Economic/</li> <li>10. Markov Chains/</li> <li>11. Monte Carlo Method/</li> <li>12. Decision Trees/</li> <li>13. econom\$.tw.</li> <li>14. cba.tw.</li> <li>15. cea.tw.</li> </ol>

16. cua.tw.
17. markov\$.tw.
18. (monte adj carlo).tw.
19. (decision adj2 (tree\$ or analys\$)).tw.
20. (cost or costs or costing\$ or costly or costed).tw.
21. (price\$ or pricing\$).tw.
22. budget\$.tw.
23. expenditure\$.tw.
24. (value adj2 (money or monetary)).tw.
25. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
26. or/1-25
27. exp Cholelithiasis/
28. (cholelithiasis or choledochlithiasis or cholecystolithiasis).tw.
29. (gall stone\$ or gallstone\$).tw.
30. exp Cholecystitis/
31. cholecystitis.tw.
32. ((gall bladder or gallbladder) adj3 inflam\$).tw.
33. 27 or 28 or 29 or 30 or 31 or 32
34. ((sign\$ or test\$) adj3 murphy\$).tw.
35. exp Hematologic Tests/
36. exp Blood Chemical Analysis/
37. exp Serologic Tests/
38. ((test\$ or analy\$) adj3 blood).tw.
39. ((test\$ or analy\$) adj3 hematolog\$).tw.
40. ((test\$ or analy\$) adj3 haematolog\$).tw.
41. ((test\$ or analy\$) adj3 serolog\$).tw.

42. exp X-Rays/
43. x\$ ra\$.tw.
44. exp Ultrasonography/
45. ultrasonograph\$.tw.
46. exp Tomography, X-Ray Computed/
47. (computer\$ adj3 tomograph\$).tw.
48. (CT adj3 scan\$).tw.
49. ((hepatobiliary or hepato-biliary or HIDA) adj3 scan\$).tw.
50. ((DISIDA or diisopropyl\$) adj3 scan\$).tw.
51. (gall\$ adj3 radionuclide scan\$).tw.
52. ((gall bladder or gallbladder or chole\$) adj3 scintigraph\$).tw.
53. cholescintigraph\$.tw.
54. exp Magnetic Resonance Imaging/
55. magnetic resonance imag\$.tw.
56. ((imag\$ or scan\$) adj3 MRI).tw.
57. ((magnetic adj3 resonance adj3 cholangiopancreatograph\$) or MRCP).tw.
58. exp Cholangiopancreatography, Endoscopic Retrograde/
59. ((endoscopic adj3 retrograde adj3 cholangiopancreatograph\$) or ERCP).tw.
60. di.fs. or Diagnosis/ or diagnos\$.tw.
61. (58 or 59) and 60
62. (or/34-57) or 61
63. 33 and 62
64. 26 and 63
65. animals/ not humans/
66. 64 not 65
67. limit 66 to english language



**Notes:** Adaptation of clinical search discussed with SW. Agreed that study design filters would not be used.

**Database: Embase Dates Searched: 1974 to 2014 week 07**

Strategy used:

1. exp Health Economics/
2. exp "Health Care Cost"/
3. exp Pharmacoeconomics/
4. Monte Carlo Method/
5. Decision Tree/
6. econom\$.tw.
7. cba.tw.
8. cea.tw.
9. cua.tw.
10. markov\$.tw.
11. (monte adj carlo).tw.
12. (decision adj2 (tree\$ or analys\$)).tw.
13. (cost or costs or costing\$ or costly or costed).tw.
14. (price\$ or pricing\$).tw.
15. budget\$.tw.
16. expenditure\$.tw.
17. (value adj2 (money or monetary)).tw.
18. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
19. or/1-18
20. exp cholelithiasis/ or bile duct stone/ or cholesterol stone/ or exp common bile duct stone/ or gallstone/ or gallstone formation/ or mirizzi syndrome/
21. (cholelithiasis or choledochlithiasis or cholecystolithiasis).tw.

22. (gall stone\* or gallstone\*).tw.
23. exp cholecystitis/
24. cholecystitis.tw.
25. ((gall bladder or gallbladder) adj3 inflam\*).tw.
26. 20 or 21 or 22 or 23 or 24 or 25
27. ((sign\* or test\*) adj3 murphy\*).tw.
28. exp blood analysis/
29. exp serology/
30. ((test\* or analy\*) adj3 blood).tw.
31. ((test\* or analy\*) adj3 hematolog\*).tw.
32. ((test\* or analy\*) adj3 haematolog\*).tw.
33. ((test\* or analy\*) adj3 serolog\*).tw.
34. exp X ray/
35. x\* ra\*.tw.
36. exp echography/
37. ultrasonograph\*.tw.
38. exp computer assisted tomography/
39. (computer\* adj3 tomograph\*).tw.
40. (CT adj3 scan\*).tw.
41. ((hepatobiliary or hepato-biliary or HIDA) adj3 scan\*).tw.
42. ((DISIDA or diisopropyl\*) adj3 scan\*).tw.
43. (gall\* adj3 radionuclide scan\*).tw.
44. ((gall bladder or gallbladder or chole\*) adj3 scintigraph\*).tw.
45. cholescintigraph\*.tw.
46. exp nuclear magnetic resonance imaging/
47. magnetic resonance imag\*.tw.

48. ((imag\* or scan\*) adj3 MRI).tw.
49. ((magnetic adj3 resonance adj3 cholangiopancreatograph\*) or MRCP).tw.
50. exp endoscopic retrograde cholangiopancreatography/
51. ((endoscopic adj3 retrograde adj3 cholangiopancreatograph\*) or ERCP).tw.
52. diagnosis/
53. diagnos\*.tw. or di.fs.
54. 50 or 51
55. 52 or 53
56. 54 and 55
57. 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 56
58. 26 and 57
59. 19 and 58
60. nonhuman/ not human/
61. 59 not 60
62. limit 61 to (english language and embase)
63. limit 62 to conference abstract
64. 62 not 63

**Notes:** NHS EED and HEED searched with population terms

**Database: EED Dates Searched: 18 Feb 2014**

Strategy used:

- #1 MeSH descriptor: [Cholelithiasis] explode all trees
- #2 MeSH descriptor: [Choledocholithiasis] explode all trees
- #3 MeSH descriptor: [Cholecystolithiasis] explode all trees
- #4 MeSH descriptor: [Cholecystitis] explode all trees
- #5 MeSH descriptor: [Cholecystectomy] explode all trees
- #6 cholelithiasis or choledocholithiasis or cholecystolithiasis or cholecystitis or

<p>cholecystectom*:ti,ab,kw (Word variations have been searched)</p> <p>#7 gall stone* or gallstone*:ti,ab,kw (Word variations have been searched)</p> <p>#8 ((gallbladder or gall bladder) near/3 inflam*):ti,ab,kw (Word variations have been searched)</p> <p>#9 ((gallbladder or gall bladder) near/3 remov*):ti,ab,kw (Word variations have been searched)</p> <p>#10 MeSH descriptor: [Gallbladder] explode all trees and with qualifiers: [Surgery - SU]</p> <p>#11 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10</p>
<p>Notes: Run through Wiley/Cochrane</p>

<p><b>Database: HEED Dates Searched: 18 Feb 2014</b></p>
<p>Strategy used:</p> <p>Cholecystitis or cholecystectom* or cholelithiasis or choledocholithiasis or cholecystolithiasis or 'gall bladder' or gallbladder or 'gall stone' or 'gall stones' or gallstone*</p>

## D.9 Search strategy – Health Economics Question 3

<p><b>Database: Medline/MiP Dates Searched: 1946 to February week 1 2014</b></p>
<p>Strategy used:</p> <ol style="list-style-type: none"> <li>1. exp Cholelithiasis/ or Choledocholithiasis/ or Cholecystolithiasis/</li> <li>2. (cholelithiasis or choledocholithiasis or cholecystolithiasis).tw.</li> <li>3. (gall stone* or gallstone*).tw.</li> <li>4. exp Cholecystitis/</li> <li>5. cholecystitis.tw.</li> <li>6. ((gallbladder or gall bladder) adj4 inflam*).tw.</li> <li>7. 1 or 2 or 3 or 4 or 5 or 6</li> <li>8. exp Asymptomatic Diseases/</li> <li>9. (asymptomatic or incidental or silent or ((without or absen*) adj4 symptom*)).tw.</li> <li>10. 8 or 9</li> <li>11. 7 and 10</li> <li>12. incidence.sh. or exp mortality/</li> </ol>

13. follow-up studies.sh.
14. prognos:.tw.
15. predict:.tw.
16. course:.tw.
17. 12 or 13 or 14 or 15 or 16
18. 7 and 17
19. 11 or 18
20. animals/ not humans/
21. 19 not 20
22. Economics/
23. exp "Costs and Cost Analysis"/
24. Economics, Dental/
25. exp Economics, Hospital/
26. exp Economics, Medical/
27. Economics, Nursing/
28. Economics, Pharmaceutical/
29. Budgets/
30. exp Models, Economic/
31. Markov Chains/
32. Monte Carlo Method/
33. Decision Trees/
34. econom\$.tw.
35. cba.tw.
36. cea.tw.
37. cua.tw.
38. markov\$.tw.

39. (monte adj carlo).tw.
40. (decision adj2 (tree\$ or analys\$)).tw.
41. (cost or costs or costing\$ or costly or costed).tw.
42. (price\$ or pricing\$).tw.
43. budget\$.tw.
44. expenditure\$.tw.
45. (value adj2 (money or monetary)).tw.
46. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
47. or/22-46
48. animals/ not humans/
49. 47 not 48
50. 21 and 49
51. limit 50 to english language

**Notes:** Economic evaluations filter used

**Database: Embase Dates Searched: 1974 to 2014 week 07**

**Strategy used**

1. exp cholelithiasis/
2. (cholelithiasis or choledocholithiasis or cholecystolithiasis).tw.
3. (gall stone\* or gallstone\*).tw.
4. exp cholecystitis/
5. cholecystitis.tw.
6. ((gallbladder or gall bladder) adj4 inflam\*).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. exp asymptomatic disease/
9. (asymptomatic or incidental or silent or ((without or absen\*) adj4 symptom\*)).tw.

10. 8 or 9
11. 7 and 10
12. exp disease course/
13. risk:.mp.
14. diagnos:.mp.
15. follow-up.mp.
16. ep.fs.
17. outcome.tw.
18. 12 or 13 or 14 or 15 or 16 or 17
19. 7 and 18
20. 11 or 19
21. Nonhuman/ not Human/
22. 20 not 21
23. exp Health Economics/
24. exp "Health Care Cost"/
25. exp Pharmacoeconomics/
26. Monte Carlo Method/
27. Decision Tree/
28. econom\$.tw.
29. cba.tw.
30. cea.tw.
31. cua.tw.
32. markov\$.tw.
33. (monte adj carlo).tw.
34. (decision adj2 (tree\$ or analys\$)).tw.
35. (cost or costs or costing\$ or costly or costed).tw.

36. (price\$ or pricing\$).tw.
37. budget\$.tw.
38. expenditure\$.tw.
39. (value adj2 (money or monetary)).tw.
40. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
41. or/23-40
42. nonhuman/ not human/
43. 41 not 42
44. 22 and 43
45. limit 44 to embase
46. limit 45 to (conference abstract or conference paper)
47. 45 not 46
48. limit 47 to english language

**Notes:** Economic evaluations filter used

## D.10 Search strategy – Health Economics Questions 4 & 5

**Database: Medline/MiP Dates Searched: 1946 to February week 1 2014**

Strategy used:

1. exp Cholelithiasis/ or Choledocholithiasis/ or exp Cholecystitis/ or Cholecystolithiasis/
2. exp Cholecystitis/
3. (gall stone\* or gallstone\*).tw.
4. ((gallbladder or gall bladder) adj4 inflam\*).tw.
5. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis).tw.
6. 1 or 2 or 3 or 4 or 5
7. exp Gallbladder/su or exp Bile Ducts/su
8. exp Biliary Tract Surgical Procedures/



9. Bile Ducts/ or Common Bile Duct/ or Biliary Tract/ or exp Pancreatic Ducts/
10. exp Laparoscopy/ or Endoscopy/ or exp Stents/ or exp Drainage/ or exp Biliary Tract/us
11. 9 and 10
12. ((bile duct\* or biliary tract or pancreatic duct\*) adj4 (laparoscop\* or endoscop\* or stent\* or drain\* or ultraso\* or celioscop\*)).tw.
13. exp Cholecystectomy/
14. cholecystectom\*.tw.
15. choledochoscop\*.tw.
16. exp Cholangiography/ or Cholecystography/
17. (cholangiogra\* or cholecystograph\*).tw.
18. (bile duct \* adj4 explor\*).tw.
19. ((endoscopic adj1 retrograde adj1 cholangiopancreatograph\*) or ercp).tw.
20. (balloon sphincteroplast\* or transduodenal sphinteroplast\* or ts).tw.
21. exp Lithotripsy/
22. lithotripsy.tw.
23. Cholecystostomy/
24. cholecystostom\*.tw.
25. (percutaneous adj4 biliary intervention\*).tw.
26. (pthc or ptc).tw.
27. Sphincterotomy ,Endoscopic/
28. (endoscop\* adj4 (sphincterotom\* or papilllotom\*)).tw.
29. Sphincterotomy, Transhepatic/
30. ((transhepatic or transduodenal) adj4 (sphinctertom\* or sphincteroplast\*)).tw.
31. transampullary septectom\*.tw.
32. exp Ursodeoxycholic Acid/
33. ((ursodeoxychol\* adj1 acid) or ursodiol or ((dissolve\* adj4 therap) or treat\*)).tw.

34. exp Anti-Bacterial Agents/
35. antibiotic\*.tw.
36. exp Analgesics/
37. analgesic\*.tw.
38. Watchful Waiting/
39. (watch\* adj2 wait\*).tw.
40. 7 or 8 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39
41. 6 and 40
42. Economics/
43. exp "Costs and Cost Analysis"/
44. Economics, Dental/
45. exp Economics, Hospital/
46. exp Economics, Medical/
47. Economics, Nursing/
48. Economics, Pharmaceutical/
49. Budgets/
50. exp Models, Economic/
51. Markov Chains/
52. Monte Carlo Method/
53. Decision Trees/
54. econom\$.tw.
55. cba.tw.
56. cea.tw.
57. cua.tw.
58. markov\$.tw.

59. (monte adj carlo).tw.
60. (decision adj2 (tree\$ or analys\$)).tw.
61. (cost or costs or costing\$ or costly or costed).tw.
62. (price\$ or pricing\$).tw.
63. budget\$.tw.
64. expenditure\$.tw.
65. (value adj2 (money or monetary)).tw.
66. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
67. or/42-66
68. 41 and 67
69. animals/ not humans/
70. 68 not 69
71. limit 70 to english language

**Notes:** Economic evaluations filter used

**Database: Embase Dates Searched: 1974 to 2014 week 07**

Strategy used:

1. exp cholelithiasis/
2. exp common bile duct stone/
3. exp cholecystitis/
4. (gall stone\* or gallstone\*).tw.
5. ((gallbladder or gall bladder) adj4 inflam\*).tw.
6. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis).tw.
7. 1 or 2 or 3 or 4 or 5 or 6
8. exp gallbladder/su [Surgery]
9. exp bile duct/su [Surgery]

10. exp biliary tract surgery/
11. bile duct/
12. common bile duct/
13. hepatobiliary system/
14. pancreas duct/
15. 11 or 12 or 13 or 14
16. exp laparoscopy/
17. endoscopy/
18. exp stent/
19. exp biliary tract drainage/
20. 16 or 17 or 18 or 19
21. 15 and 20
22. ((bile duct\* or biliary tract or pancreatic duct\*) adj4 (laparoscop\* or endoscop\* or stent\* or drain\* or ultraso\* or celioscop\*)).tw.
23. exp cholecystectomy/
24. cholecystectom\*.tw.
25. exp biliary tract endoscopy/
26. choledochoscop\*.tw.
27. exp cholangiography/
28. exp cholecystography/
29. (cholangiogra\* or cholecystograph\*).tw.
30. (bile duct \* adj4 explor\*).tw.
31. ((endoscopic adj1 retrograde adj1 cholangiopancreatograph\*) or ercp).tw.
32. (balloon sphincteroplast\* or transduodenal sphinteroplast\* or ts).tw.
33. exp lithotripsy/
34. lithotripsy.tw.

35. exp cholecystostomy/
36. cholecystostom\*.tw.
37. (percutaneous adj4 biliary intervention\*).tw.
38. (pthc or ptc).tw.
39. exp endoscopic sphincterotomy/
40. (endoscop\* adj4 (sphincterotom\* or papilllotom\*)).tw.
41. ((transhepatic or transduodenal) adj4 (sphinctertom\* or sphincteroplast\*)).tw.
42. exp vater papillotomy/
43. transampullary septectom\*.tw.
44. exp ursodeoxycholic acid/
45. ((ursodeoxychol\* adj1 acid) or ursodiol or ((dissolve\* adj4 therap) or treat\*)).tw.
46. exp antibiotic agent/
47. antibiotic\*.tw.
48. exp analgesic agent/
49. analgesic\*.tw.
50. Watchful Waiting/
51. (watch\* adj2 wait\*).tw.
52. 8 or 9 or 10 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 or 51
53. 7 and 52
54. nonhuman/ not human/
55. 53 not 54
56. exp Health Economics/
57. exp "Health Care Cost"/
58. exp Pharmacoeconomics/
59. Monte Carlo Method/

60. Decision Tree/
61. econom\$.tw.
62. cba.tw.
63. cea.tw.
64. cua.tw.
65. markov\$.tw.
66. (monte adj carlo).tw.
67. (decision adj2 (tree\$ or analys\$)).tw.
68. (cost or costs or costing\$ or costly or costed).tw.
69. (price\$ or pricing\$).tw.
70. budget\$.tw.
71. expenditure\$.tw.
72. (value adj2 (money or monetary)).tw.
73. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
74. or/56-73
75. nonhuman/ not human/
76. 74 not 75
77. limit 76 to embase
78. limit 77 to (conference abstract or conference paper)
79. 77 not 78
80. limit 79 to 62nglish language
81. 55 and 80

**Notes: Economic evaluation filter used**

## D.11 Search strategy – Health Economics Question 6

**Database: Medline** **Dates Searched:** 1946 to February week 1 2014

Strategy used:

1. exp Cholelithiasis/ or Choledocholithiasis/ or exp Cholecystitis/ or Cholecystolithiasis/
2. ((gallbladder or gall bladder) adj4 inflam\*).tw.
3. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis or gall stone\* or gallstone\*).tw.
4. exp Gallbladder/su or exp Bile Ducts/su
5. exp Biliary Tract Surgical Procedures/
6. exp Cholecystectomy/
7. (cholecystectom\* or ((gallbladder or gall bladder) adj4 remov\*)).tw.
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. Qualitative Research/
10. Nursing Methodology Research/
11. exp Interviews as topic/
12. Questionnaires/
13. Narration/
14. Health Care Surveys/
15. (qualitative\$ or interview\$ or focus group\$ or questionnaire\$ or narrative\$ or narration\$ or survey\$).tw.
16. (ethno\$ or emic or etic or phenomenolog\$ or grounded theory or constant compar\$ or (thematic\$ adj3 analys\$) or theoretical sampl\$ or purposive sampl\$).tw.
17. (hermeneutic\$ or heidegger\$ or husserl\$ or colaizzi\$ or van kaam\$ or van manen\$ or giorgi\$ or glaser\$ or strauss\$ or ricoeur\$ or spiegelberg\$ or merleau\$).tw.
18. (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$ or metathem\$ or meta-them\$).tw.
19. or/9-18
20. exp Patients/px
21. exp Family/px
22. Caregivers/px

23. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$) adj5 (experience\$ or belief\$ or stress\$ or emotion\$ or anx\$ or fear\$ or concern\$ or uncertain\$ or unsure or thought\$ or feeling\$ or felt\$ or view\$ or opinion\$ or perception\$ or perspective\$ or attitud\$ or satisfact\$ or know\$ or understand\$ or aware\$)).ti.

24. Stress, Psychological/

25. Adaptation, psychological/

26. Emotions/

27. Anxiety/

28. Fear/

29. exp Consumer Satisfaction/

30. patient\$ report\$ outcome\$.tw.

31. or/20-30

32. exp Patients/

33. exp Family/

34. Caregivers/

35. (patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$).ti.

36. or/32-35

37. Pamphlets/

38. Needs Assessment/

39. Information Centers/

40. Information Services/

41. Health Education/

42. Information Dissemination/

43. Counseling/

44. Social Support/

45. Self-Help Groups/



46. Self Care/

47. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj5 (educat\$ or informat\$ or communicat\$ or pamphlet\$ or handout\$ or hand-out\$ or hand out\$ or booklet\$ or leaflet\$ or support\$ or need\$ or advice\$ or advis\$)).ti.

48. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj5 (counsel\$ or selfhelp\$ or self-help\$ or self help\$ or selfcar\$ or self-car\$ or self car\$)).ti.

49. Patient Education as Topic/

50. Patient Education Handout/

51. Consumer Health Information/

52. patient\* diar\*.tw.

53. or/37-52

54. 36 and 53

55. 19 or 31 or 54

56. Animals/ not Humans/

57. 55 not 56

58. 8 and 57

59. limit 58 to english language

60. Economics/

61. exp "Costs and Cost Analysis"/

62. Economics, Dental/

63. exp Economics, Hospital/

64. exp Economics, Medical/

65. Economics, Nursing/

66. Economics, Pharmaceutical/

67. Budgets/

68. exp Models, Economic/

69. Markov Chains/
70. Monte Carlo Method/
71. Decision Trees/
72. econom\$.tw.
73. cba.tw.
74. cea.tw.
75. cua.tw.
76. markov\$.tw.
77. (monte adj carlo).tw.
78. (decision adj2 (tree\$ or analys\$)).tw.
79. (cost or costs or costing\$ or costly or costed).tw.
80. (price\$ or pricing\$).tw.
81. budget\$.tw.
82. expenditure\$.tw.
83. (value adj2 (money or monetary)).tw.
84. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
85. or/60-84
86. 59 and 85
87. limit 86 to english language

**Database : Medline in Process Dates Searched: 1946 to February week 1 2014**

- Strategy used: 1. exp Cholelithiasis/ or Choledocholithiasis/ or exp Cholecystitis/ or Cholecystolithiasis/
2. ((gallbladder or gall bladder) adj4 inflam\*).tw.
  3. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis or gall stone\* or gallstone\*).tw.
  4. exp Gallbladder/su or exp Bile Ducts/su

5. exp Biliary Tract Surgical Procedures/
6. exp Cholecystectomy/
7. (cholecystectom\* or ((gallbladder or gall bladder) adj4 remov\*)).tw.
8. 1 or 2 or 3 or 4 or 5 or 6 or 7
9. (qualitative\$ or interview\$ or focus group\$ or questionnaire\$ or narrative\$ or narration\$ or survey\$).tw.
10. (ethno\$ or emic or etic or phenomenolog\$ or grounded theory or constant compar\$ or (thematic\$ adj3 analys\$) or theoretical sampl\$ or purposive sampl\$).tw.
11. (hermeneutic\$ or heidegger\$ or husser\$ or colaizzi\$ or van kaam\$ or van manen\$ or giorgi\$ or glaser\$ or strauss\$ or ricoeur\$ or spiegelberg\$ or merleau\$).tw.
12. (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$ or metathem\$ or meta-them\$).tw.
13. or/9-12
14. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or inpatient\$ or spouse\$ or husband\$ or wife\$ or wives\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$) adj5 (experience\$ or belief\$ or stress\$ or emotion\$ or anx\$ or fear\$ or concern\$ or uncertain\$ or unsure or thought\$ or feeling\$ or felt\$ or view\$ or opinion\$ or perception\$ or perspective\$ or attitud\$ or satisfact\$ or know\$ or understand\$ or aware\$)).tw.
15. patient\$ report\$ outcome\$.tw.
16. (patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or inpatient\$ or spouse\$ or husband\$ or wife\$ or wives\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$).tw.
17. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wife\$ or partner\$) adj5 (educat\$ or informat\$ or communicat\$ or pamphlet\$ or handout\$ or hand-out\$ or hand out\$ or booklet\$ or leaflet\$ or support\$ or need\$ or advice\$ or advis\$)).ti.
18. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wife\$ or partner\$) adj5 (counsel\$ or selfhelp\$ or self-help\$ or self help\$ or selfcar\$ or self-car\$ or self car\$)).ti.
19. patient\* diar\*.tw.
20. or/17-19
21. 16 and 20

22. 13 or 14 or 15 or 21
23. 8 and 22
24. limit 23 to english language
25. Economics/
26. exp "Costs and Cost Analysis"/
27. Economics, Dental/
28. exp Economics, Hospital/
29. exp Economics, Medical/
30. Economics, Nursing/
31. Economics, Pharmaceutical/
32. Budgets/
33. exp Models, Economic/
34. Markov Chains/
35. Monte Carlo Method/
36. Decision Trees/
37. econom\$.tw.
38. cba.tw.
39. cea.tw.
40. cua.tw.
41. markov\$.tw.
42. (monte adj carlo).tw.
43. (decision adj2 (tree\$ or analys\$)).tw.
44. (cost or costs or costing\$ or costly or costed).tw.
45. (price\$ or pricing\$).tw.
46. budget\$.tw.
47. expenditure\$.tw.

48. (value adj2 (money or monetary)).tw.

49. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.

50. or/25-49

51. 24 and 50

**Database: Embase Dates Searched: 1974 to 2014 week 07**

**Strategy used:**

1. exp cholelithiasis/

2. exp common bile duct stone/

3. exp cholecystitis/

4. ((gallbladder or gall bladder) adj4 inflam\*).tw.

5. (cholelithiasis or choledocholithiasis or cholecystitis or cholecystolithiasis or gall stone\* or gallstone\*).tw.

6. exp gallbladder/su [Surgery]

7. exp bile duct/su [Surgery]

8. exp biliary tract surgery/

9. exp cholecystectomy/

10. (cholecystectom\* or ((gallbladder or gall bladder) adj4 remov\*)).tw.

11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10

12. Qualitative Research/

13. exp Interview/

14. exp Questionnaire/

15. exp Observational Method/

16. Narrative/

17. (qualitative\$ or interview\$ or focus group\$ or questionnaire\$ or narrative\$ or narration\$ or survey\$).tw.

18. (ethno\$ or emic or etic or phenomenolog\$ or grounded theory or constant compar\$ or (thematic\$ adj3 analys\$) or theoretical sampl\$ or purposive sampl\$).tw.

19. (hermeneutic\$ or heidegger\$ or husser\$ or colaizzi\$ or van kaam\$ or van manen\$ or giorgi\$ or glaser\$ or strauss\$ or ricoeur\$ or spiegelberg\$ or merleau\$).tw.

20. (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$ or metathem\$ or meta-them\$).tw.

21. or/12-20

22. exp parent/

23. exp family/

24. caregiver/

25. exp Patient/

26. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or inpatient\$ or spouse\$ or husband\$ or wife\$ or wives\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$) adj5 (experience\$ or belief\$ or stress\$ or emotion\$ or anx\$ or fear\$ or concern\$ or uncertain\$ or unsure or thought\$ or feeling\$ or felt\$ or view\$ or opinion\$ or perception\$ or perspective\$ or attitud\$ or satisfact\$ or know\$ or understand\$ or aware\$)).tw.

27. exp Patient Attitude/

28. EMOTION/

29. FEAR/

30. Anxiety/

31. exp family attitude/

32. Mental Stress/

33. Adaptive Behavior/

34. Consumer/

35. patient\$ report\$ outcome\$.tw.

36. or/22-35

37. exp parent/

38. exp family/

39. caregiver/

40. exp Patient/

41. (patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or inpatient\$ or spouse\$ or husband\$ or wife\$ or wives\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$).tw.
42. or/37-41
43. publication/
44. needs assessment/
45. information center/
46. information service/
47. health education/
48. information dissemination/
49. exp counseling/
50. social support/
51. self help/
52. self care/
53. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wife\$ or partner\$) adj5 (educat\$ or informat\$ or communicat\$ or pamphlet\$ or handout\$ or hand-out\$ or hand out\$ or booklet\$ or leaflet\$ or support\$ or need\$ or advice\$ or advis\$)).ti.
54. ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wife\$ or partner\$) adj5 (counsel\$ or selfhelp\$ or self-help\$ or self help\$ or selfcar\$ or self-car\$ or self car\$)).ti.
55. patient education/
56. consumer health information/
57. patient\* diar\*.tw.
58. or/43-57
59. 42 and 58
60. 21 or 36 or 59
61. 11 and 60
62. nonhuman/ not human/

63. 61 not 62
64. limit 63 to embase
65. limit 64 to (conference abstract or conference paper)
66. 64 not 65
67. limit 66 to english language
68. exp Health Economics/
69. exp "Health Care Cost"/
70. exp Pharmacoeconomics/
71. Monte Carlo Method/
72. Decision Tree/
73. econom\$.tw.
74. cba.tw.
75. cea.tw.
76. cua.tw.
77. markov\$.tw.
78. (monte adj carlo).tw.
79. (decision adj2 (tree\$ or analys\$)).tw.
80. (cost or costs or costing\$ or costly or costed).tw.
81. (price\$ or pricing\$).tw.
82. budget\$.tw.
83. expenditure\$.tw.
84. (value adj2 (money or monetary)).tw.
85. (pharmacoeconomic\$ or (pharmaco adj economic\$)).tw.
86. or/68-85
87. 67 and 86



## D.12 Search strategy – Health Economics Quality of Life Studies (Gallstones)

**Database: Medline Dates Searched: 1946 to February week 1 2014**

Strategy used:

1. "Quality of Life"/
2. quality of life.tw.
3. "Value of Life"/
4. Quality-Adjusted Life Years/
5. quality adjusted life.tw.
6. (qaly\$ or qald\$ or qale\$ or qtime\$).tw.
7. disability adjusted life.tw.
8. daly\$.tw.
9. Health Status Indicators/
10. (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirty six or short form thirtysix or short form thirty six).tw.
11. (sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw.
12. (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).tw.
13. (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).tw.
14. (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw.
15. (euroqol or euro qol or eq5d or eq 5d).tw.
16. (qol or hql or hqol or hrqol).tw.
17. (hye or hyes).tw.
18. health\$ year\$ equivalent\$.tw.
19. utilit\$.tw.
20. (hui or hui1 or hui2 or hui3).tw.

21. disutili\$.tw.
22. rosser.tw.
23. quality of wellbeing.tw.
24. quality of well-being.tw.
25. qwb.tw.
26. willingness to pay.tw.
27. standard gamble\$.tw.
28. time trade off.tw.
29. time tradeoff.tw.
30. tto.tw.
31. or/1-30
32. exp Cholelithiasis/
33. cholelithiasis.tw.
34. (gall stone\* or gallstone\*).tw.
35. exp Cholecystectomy/
36. cholecystectom\*.tw.
37. ((gall bladder or gallbladder) adj3 remov\*).tw.
38. \*Gallbladder/su [Surgery]
39. exp Cholecystitis/
40. cholecystitis.tw.
41. ((gallbladder or gall bladder) adj3 inflam\*).tw.
42. exp Choledocholithiasis/ or exp Cholecystolithiasis/
43. (choledocholithiasis or cholecystolithiasis).tw.
44. 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43
45. 31 and 44
46. animals/ not humans/

47. 45 not 46

48. limit 47 to english language

**Database: Embase Dates Searched: 1974 to 2014 week07**

Strategy used:

1. "Quality of Life"/
2. Quality Adjusted Life Year/
3. Quality of Life Index/
4. Short Form 36/
5. Health Status/
6. quality of life.tw.
7. quality adjusted life.tw.
8. (qaly\$ or qald\$ or qale\$ or qtime\$).tw.
9. disability adjusted life.tw.
10. daly\$.tw.
11. (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirty six or short form thirtysix or short form thirty six).tw.
12. (sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw.
13. (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).tw.
14. (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).tw.
15. (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw.
16. (euroqol or euro qol or eq5d or eq 5d).tw.
17. (qol or hql or hqol or hrqol).tw.
18. (hye or hyes).tw.
19. health\$ year\$ equivalent\$.tw.

20. utilit\$.tw.
21. (hui or hui1 or hui2 or hui3).tw.
22. disutili\$.tw.
23. rosser.tw.
24. quality of wellbeing.tw.
25. quality of well-being.tw.
26. qwb.tw.
27. willingness to pay.tw.
28. standard gamble\$.tw.
29. time trade off.tw.
30. time tradeoff.tw.
31. tto.tw.
32. or/1-31
33. exp cholelithiasis/
34. exp common bile duct stone/
35. exp cholecystitis/
36. (gall stone\* or gallstone\*).tw.
37. (cholelithiasis or cholecystitis or choledocholithiasis or cholecystolithiasis).tw.
38. ((gallbladder or gall bladder) adj3 inflam\*).tw.
39. gallbladder/su [Surgery]
40. 33 or 34 or 35 or 36 or 37 or 38 or 39
41. 32 and 40
42. nonhuman/ not human/
43. 41 not 42
44. limit 43 to (conference abstract or conference paper)
45. 43 not 44

46. limit 45 to (english language and embase)

## D.13 Search strategy – Health Economics Quality of Life Studies (Renal Stones and Appendicitis)

**Database: Medline/Mip Dates Searched: 1946 to February week 1 2014**

1. exp Kidney Calculi/ or exp Nephrolithiasis/
2. ((renal or kidney or urinary) adj4 stone\*).tw.
3. ((renal or kidney or urinary) adj4 calcul\*).tw.
4. (calcium oxalate stone\* or uric acid stone\* or calcium phosphate stone\*).tw.
5. (nephrolith\* or urolithiasis\*).tw.
6. 1 or 2 or 3 or 4 or 5
7. exp Appendicitis/
8. (appendicitis or (appendix adj4 inflam\*).tw.
9. 7 or 8
10. 6 or 9
11. "Quality of Life"/
12. quality of life.tw.
13. "Value of Life"/
14. Quality-Adjusted Life Years/
15. quality adjusted life.tw.
16. (qaly\$ or qald\$ or qale\$ or qtime\$).tw.
17. disability adjusted life.tw.
18. daly\$.tw.
19. Health Status Indicators/
20. (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirty six or short form thirtysix or short form thirty six).tw.
21. (sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw.

22. (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).tw.
23. (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).tw.
24. (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw.
25. (euroqol or euro qol or eq5d or eq 5d).tw.
26. (qol or hql or hqol or hrqol).tw.
27. (hye or hyes).tw.
28. health\$ year\$ equivalent\$.tw.
29. utilit\$.tw.
30. (hui or hui1 or hui2 or hui3).tw.
31. disutili\$.tw.
32. rosser.tw.
33. quality of wellbeing.tw.
34. quality of well-being.tw.
35. qwb.tw.
36. willingness to pay.tw.
37. standard gamble\$.tw.
38. time trade off.tw.
39. time tradeoff.tw.
40. tto.tw.
41. or/11-40
42. 10 and 41
43. animals/ not humans/
44. 42 not 43
45. limit 44 to english language

Notes:

Nothing when limited to EQ-5D. It was agreed with Steven Ward that the search would combine population terms and qaly filter.

**Database: Embase Dates Searched: 1974 to 2014 week 07**

Strategy used:

1. exp nephrolithiasis/
2. ((kidney or renal or urinary) adj4 stone\*).tw.
3. ((kidney or renal or urinary) adj4 calcul\*).tw.
4. (calcium oxalate stone\* or uric acid stone\* or calcium phosphate stone\*).tw.
5. (nephrolith\* or urolithiasis\*).tw.
6. 1 or 2 or 3 or 4 or 5
7. exp appendicitis/
8. (appendicitis or (appendix adj4 inflam\*)).tw.
9. 7 or 8
10. 6 or 9
11. "Quality of Life"/
12. Quality Adjusted Life Year/
13. Quality of Life Index/
14. Short Form 36/
15. Health Status/
16. quality of life.tw.
17. quality adjusted life.tw.
18. (qaly\$ or qald\$ or qale\$ or qtime\$).tw.
19. disability adjusted life.tw.

20. daly\$.tw.
21. (sf36 or sf 36 or short form 36 or shortform 36 or sf thirtysix or sf thirty six or shortform thirtysix or shortform thirty six or short form thirtysix or short form thirty six).tw.
22. (sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw.
23. (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).tw.
24. (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).tw.
25. (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw.
26. (euroqol or euro qol or eq5d or eq 5d).tw.
27. (qol or hql or hqol or hrqol).tw.
28. (hye or hyes).tw.
29. health\$ year\$ equivalent\$.tw.
30. utilit\$.tw.
31. (hui or hui1 or hui2 or hui3).tw.
32. disutili\$.tw.
33. rosser.tw.
34. quality of wellbeing.tw.
35. quality of well-being.tw.
36. qwb.tw.
37. willingness to pay.tw.
38. standard gamble\$.tw.
39. time trade off.tw.
40. time tradeoff.tw.
41. tto.tw.
42. or/11-41



43. 10 and 42

44. nonhuman/ not human/

45. 43 not 44

46. limit 45 to (conference abstract or conference paper)

47. 45 not 46

48. limit 47 to (english language and embase)

**Notes:**

Nothing when limited to EQ-5D. It was agreed with Steven Ward that the search would combine population terms and qaly filter.

Small number of results so qaly filter not used

**Database: HEED Dates Searched: up to 27 Feb 2014**

**Strategy used:**

nephrolithiasis or urolithiasis or 'renal stone' or 'renal stones' or 'kidney stone' or 'kidney stones' or 'urinary stone' or 'urinary stones' or 'renal calculi' or 'kidney calculi' or 'urinary calculi' or 'calcium oxalate stone' or 'calcium oxalate stones' or 'uric acid stone' or 'uric acid stones' or 'calcium phosphate stone' or 'calcium phosphate stones' or appendicitis

