

# Appendix D: Review search strategies

## D.1 Scoping search strategies

### D.1.1 Scoping searches

Scoping searches were undertaken on the following websites and databases (listed in alphabetical order) in November 2014 to provide information for scope development and project planning. Browsing or simple search strategies were employed.

Guidelines/website	Systematic review/economic evaluations
Action for Blind People	Cochrane Database of Systematic Reviews (CDSR)
American Academy of Ophthalmology	Database of Abstracts of Reviews of Effects (DARE)
American Optometric Association	DUETS
Canadian Ophthalmological Society	Health Economic Evaluations Database (HEED)
Core Outcome Measures in Effectiveness Trials (COMET)	Health Technology Assessment (HTA) Database
Department of Health	NHS Economic Evaluation Database (NHS EED)
European Society of Cataract & Refractive Surgeons	NIHR Health Technology Assessment Programme
Eyecare Trust	NIHR Health Services and Delivery Research (HS&DR) Programme
Gov.UK	PROSPERO
Guidelines & Audit Implementation Network (GAIN)	TRIP Database
Guidelines International Network (GIN)	
Healthtalk Online	
Infobase – Canadian Medical Association	
Map of Medicine	
Ministry of Health – New Zealand	
National Health and Medical Research Council - Australia	
National Institute for Health and Care Excellence (NICE) - published & in development guidelines	
National Institute for Health and Care Excellence (NICE) - Topic Selection	
National Prescribing Centre (NPC)	
NHS Choices	
NHS England	
NICE Clinical Knowledge Summaries (CKS)	
NICE Evidence Search	
Patient UK	
Public Health England	
Royal Australian and New Zealand College of Ophthalmologists	
Royal College of Ophthalmologists	
Royal National Institute of Blind People (RNIB)	
Scottish Intercollegiate Guidelines Network (SIGN)	
UK Vision Strategy	
US National Guideline Clearinghouse	

Guidelines/website	Systematic review/economic evaluations
Vision 2020 YouthHealthtalk Online	

## 8 D.1.2 Main searches

9 Sources searched for the guideline

- 10 • Cochrane Database of Systematic Reviews – CDSR (Wiley)
- 11 • Cochrane Central Register of Controlled Trials – CENTRAL (Wiley)
- 12 • Database of Abstracts of Reviews of Effects – DARE (Wiley)
- 13 • Health Technology Assessment Database – HTA (Wiley)
- 14 • EMBASE (Ovid)
- 15 • MEDLINE (Ovid)
- 16 • MEDLINE In-Process (Ovid)
- 17 • PsychINFO (Ovid)

## 18 D.1.3 Identification of evidence for clinical questions

19 The searches were conducted between July 2015 and November 2016. The re-run searches  
20 took place in January 2017.

21 The MEDLINE search strategies conducted by NICE are presented below in section D2.  
22 These were translated for use in all of the other databases.

23 In collaboration with Cochrane, the evidence for several review questions was identified by  
24 an update of an existing Cochrane review. Review questions in this category are presented  
25 in section D3.

26 In house study design filters were appended to some strategies. The type of study design  
27 filter used is indicated by each relevant review question. Details of the study design filters  
28 used can be found in section D4.

## 29 D.2 Review question search strategies

### 30 D.2.1 Search strategy review questions 1 and 2

31 RQ1: What information do people with cataracts and their carers find useful, and what format  
32 (for example written or verbal) do they prefer it to be provided in?

33 RQ2: What information on cataract surgery do people and their carers find useful when  
34 deciding whether surgery is appropriate for them, and before, during and after any  
35 operation(s) they elect to undergo? What format (for example written or verbal) do they  
36 prefer it to be provided in?

### 37 Table 1: search strategy RQ1 and RQ2

Medline Strategy, searched 10 <sup>th</sup> November 2016	
Database: Ovid MEDLINE(R) 1946 to November Week 1 2016	
Search Strategy:	
1	exp Cataract/
2	exp Cataract Extraction/
3	cataract*.tw.

**Medline Strategy, searched 10<sup>th</sup> November 2016**  
**Database: Ovid MEDLINE(R) 1946 to November Week 1 2016**  
**Search Strategy:**

4 (pha?oemulsif\* or phaco or phako).tw.  
 5 ((lens\* or capsul\*) adj4 (opaci\* or cloud\*)).tw.  
 6 (lensectom\* or capsulorhexis or capsulorrhesis).tw.  
 7 (lens\* adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.  
 8 Lenses, Intraocular/  
 9 Lens Implantation, Intraocular/  
 10 ((lens\* adj4 (intraocul\* or implant\*)) or IOL\*).tw.  
 11 or/1-10

38 *Note: In-house patient issues filter appended to strategy.*

39 **D.2.2 Search strategy review questions 3 and 4**

40 RQ3: What are the indicators for referral for cataract surgery?

41 RQ4: What are the optimal clinical thresholds in terms of severity and impairment for referral  
 42 for cataract surgery?

43 **Table 2: search strategy RQ3 and RQ4**

**Medline Strategy, searched 16<sup>th</sup> December 2015**  
**Database: Ovid MEDLINE(R) 1946 to November Week 3 2015**  
**Search Strategy:**

1 exp cataract extraction/  
 2 (pha?oemulsif\* or phaco or phako).tw.  
 3 (lensectom\* or capsulorhexis or capsulorrhesis).tw.  
 4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.  
 5 Lens Implantation, Intraocular/  
 6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.  
 7 or/1-6  
 8 exp "Referral and Consultation"/  
 9 (referr\* or consult\* or gatekeep\* or listing or listed).tw.  
 10 (second\* adj4 opinion\*).tw.  
 11 (indicator\* or indication\* or barometer\* or manifest\*).tw.  
 12 (threshold\* or benchmark\*).tw.  
 13 ((assess\* or indicat\* or priorit\* or apprais\* or appropriateness or suitabl\*) adj4 (criteri\* or framework\* or method\*)).tw.  
 14 ((surg\* or operat\* or extract\* or implant\*) adj4 (rate\* or ratio\*)).tw.  
 15 or/8-14  
 16 7 and 15  
 17 incidence.sh.  
 18 exp mortality/  
 19 follow-up studies.sh.  
 20 prognos:.tw.  
 21 predict:.tw.  
 22 course:.tw.  
 23 or/17-22  
 24 7 and 23

**Medline Strategy, searched 16<sup>th</sup> December 2015**  
**Database: Ovid MEDLINE(R) 1946 to November Week 3 2015**  
**Search Strategy:**

- 25 16 or 24
- 26 Animals/ not Humans/
- 27 25 not 26
- 28 limit 27 to english language

44 **D.2.3 Search strategy review question 5**

45 RQ5: What is the effectiveness of different techniques for undertaking biometry?

46 **Table 3: search strategy RQ5**

**Medline Strategy, searched 14<sup>th</sup> July 2015**  
**Database: Ovid MEDLINE(R) 1946 to July Week 1 2015**  
**Search Strategy:**

- 1 exp Cataract/
- 2 exp Cataract Extraction/
- 3 cataract\*.tw.
- 4 (pha?oemulsif\* or phaco or phako).tw.
- 5 ((lens\* or capsul\*) adj4 (opaci\* or cloud\*)).tw.
- 6 (lensectom\* or capsulorhexis or capsulorrhexis).tw.
- 7 (lens\* adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or implant\* or emulsif\*)).tw.
- 8 or/1-7
- 9 Lenses, Intraocular/
- 10 Lens Implantation, Intraocular/
- 11 ((lens\* adj4 intraocul\*) or IOL\*).tw.
- 12 or/9-11
- 13 8 or 12
- 14 Biometry/
- 15 biometr\*.tw.
- 16 exp Ultrasonography/
- 17 Eye/us [Ultrasonography]
- 18 (ultrasonograph\* or echograph\* or echotomograph\*).tw.
- 19 (ultras\* adj4 (imag\* or tomograph\* or diagnos\* or scan\* or detect\* or exam\*)).tw.
- 20 (medic\* adj4 (imag\* or tomograph\* or ultrasound\*)).tw.
- 21 (immersion adj4 (ultras\* or method\* or technique\* or shell\*)).tw.
- 22 (A scan\* or B scan\* or B guided or AL scan\* or IOL measurer\*).tw.
- 23 ((A or B) adj scan\*).tw.
- 24 ((contact or applanation) adj4 (ultras\* or technique\* or method\*)).tw.
- 25 (tonometer\* or tonometr\*).tw.
- 26 (A mode adj4 (contact or applanation or ultras\*)).tw.
- 27 exp Interferometry/
- 28 (interferometr\* or interferometer\*).tw.
- 29 ((optical or ocular) adj4 coherence reflectometry).tw.
- 30 (IOLMaster or IOL Master or LENSTAR or OLCR or scheimpflug).tw.
- 31 (laser adj4 interference).tw.
- 32 (KR-7100 or Orbscan or Pentacam or Haag-Streit Lotmar or Tono-Pen or AccuPen or Aladdin).tw.

<b>Medline Strategy, searched 14<sup>th</sup> July 2015</b> <b>Database: Ovid MEDLINE(R) 1946 to July Week 1 2015</b> <b>Search Strategy:</b>	
33	or/14-32
34	Axial Length, Eye/
35	((axial or eye*) adj4 (length* or axis)).tw.
36	Corneal Topography/
37	Cornea/us [Ultrasonography]
38	((cornea* or scanning-slit) adj4 topograph*).tw.
39	(cornea* adj4 (curv* or power or map* or diameter*)).tw.
40	(videokeratograph* or photokeratoscop*).tw.
41	(keratometr* or keratoscop*).tw.
42	(keratometer* or ophthalmometer* or biometer* or visometer*).tw.
43	Anterior Chamber/us [Ultrasonography]
44	((anterior chamber adj4 depth*) or ACD).tw.
45	Corneal Pachymetry/
46	((lens or cornea*) adj4 (thick* or pachymetr*)).tw.
47	(white or white to white or horizontal limbal distance).tw.
48	or/34-47
49	33 or 48
50	13 and 49
51	Animals/ not Humans/
52	50 not 51
53	limit 52 to english language

*Note: In house RCT and systematic review filters appended to strategy.*

47 **D.2.4 Search strategy review questions 6, 7 and 8**

48 RQ6. What are the most appropriate formulae to optimise intraocular lens biometry  
49 calculation?

50 RQ7. What is the effectiveness of strategies used to select intraocular lens constants in order  
51 to optimise biometry calculation?

52 RQ8. What other factors should be considered such as, who should undertake biometry and  
53 when should preoperative biometry be assessed?

54 **Table 4: search strategy RQ6, RQ7 and RQ8**

<b>Medline Strategy, searched 25<sup>th</sup> September 2015</b> <b>Database: Ovid MEDLINE(R) 1946 to September Week 3 2015</b> <b>Search Strategy:</b>	
1	exp Cataract
2	exp Cataract Extraction/
3	cataract*.tw.
4	(pha?oemulsif* or phaco or phako).tw.
5	((lens* or capsul*) adj4 (opaci* or cloud*)).tw.
6	(lensectom* or capsulorhexis or capsulorrhesis).tw.
7	(lens* adj4 (extract* or aspirat* or operat* or remov* or surg* or excis* or implant* or emulsif*)).tw.
8	or/1-7
9	Lenses, Intraocular/

**Medline Strategy, searched 25<sup>th</sup> September 2015**

**Database: Ovid MEDLINE(R) 1946 to September Week 3 2015**

**Search Strategy:**

- 10 Lens Implantation, Intraocular/
- 11 ((lens\* adj4 intraocul\*) or IOL\*).tw.
- 12 Biometry/
- 13 biometr\*.tw.
- 14 or/9-13
- 15 8 or 14
- 16 exp "Optics and Photonics"/
- 17 ((power or sensitiv\*) adj4 (calculat\* or statistic\* or analys\* or predict\* or forecast\* or computat\* or estimat\* or select\* or total\* or corneal)).tw.
- 18 (significan\* adj4 test\*).tw.
- 19 Algorithms/
- 20 (algorithm\* or formula or formulas or formulae).tw.
- 21 (predict\* adj4 (refract\* or vision or visual or accur\* or sight)).tw.
- 22 (Hoffer or Olsen or Colebrander or Haigis or Masket or Shammas).tw.
- 23 (Binkhorst or SRK or SRKT or Sanders Retzlaff Kraff or Holladay or T2).tw.
- 24 or/16-23
- 25 Individualized Medicine/
- 26 (personalis\* or personaliz\* or individualis\* or individualiz\* or customis\* or customiz\* or tailor\*).tw.
- 27 (optimis\* or optimiz\*).tw.
- 28 ((optimal or max\* or peak) adj4 (calculat\* or computat\* or estimat\* or predict\* or effect\* or perform\* or function\* or indicat\*)).tw.
- 29 (constant\* or ray tracing or paraxial approximation).tw.
- 30 ((surgeon or axial length or AL or keratometr\*) adj4 (specific or factor\* or influence\* or effect\* or index or indices)).tw.
- 31 or/25-30
- 32 exp Professional Competence/
- 33 ((profess\* or technical or clinical or general\* or staff) adj4 (competen\* or experienc\* or skill\* or appropriat\* or suitabl\* or proficien\* or expert\* or qualif\* or proper\*)).tw.
- 34 or/32-33
- 35 Ophthalmology/
- 36 Optometry/
- 37 exp Nurses/
- 38 exp Personnel, Hospital/
- 39 (ophthal\* or optomet\* or nurs\* or surgeon\*).tw.
- 40 (hospital\* adj4 (person\* or staff\* or practit\*)).tw.
- 41 or/35-40
- 42 Biometry/
- 43 biometr\*.tw.
- 44 or/42-43
- 45 41 and 44
- 46 Preoperative Period/
- 47 Preoperative Care/
- 48 (preop\* or pre-op\*).tw.
- 49 ((before\* or ahead\* or precede\* or precedi\* or in advance) adj4 (surg\* or operat\* or procedure\*)).tw.
- 50 or/46-49
- 51 44 and 50
- 52 (second adj4 eye).tw.

**Medline Strategy, searched 25<sup>th</sup> September 2015**  
**Database: Ovid MEDLINE(R) 1946 to September Week 3 2015**  
**Search Strategy:**

- 53 Refractive Error/
- 54 ((refract\* or predict\*) adj4 (error\* or refine\* or inaccur\* or deviat\* or flaw\* or clarif\* or rectific\* or mistake\*)).tw.
- 55 ametropia\*.tw.
- 56 ((fellow eye\* or other eye) adj4 (data or measure\* or information)).tw.
- 57 or/52-56
- 58 Refraction, Ocular/
- 59 (error\* or refine\* or inaccur\* or deviat\* or flaw\* or clarif\* or rectific\* or mistake\*).tw.
- 60 58 and 59
- 61 34 or 45 or 51 or 57 or 60
- 62 24 or 31 or 61
- 63 15 and 62
- 64 Animals/ not Humans/
- 65 63 not 64
- 66 limit 65 to english language

55 *Note: In house RCT and systematic review filters appended to strategy*

56 **D.2.5 Search strategy review questions 9 and 10**

57 RQ9: What are the procedural causes of wrong lens implant errors?

58 RQ10: What strategies should be adopted to reduce the risk of wrong lens implant errors?

59 **Table 5: search strategy RQ9 and RQ10**

**Medline Strategy, searched 11<sup>th</sup> December 2015**  
**Database: Ovid MEDLINE(R) 1946 to May Week 4 2016**  
**Search Strategy:**

- 1 exp Cataract/
- 2 exp Cataract Extraction/
- 3 cataract\*.tw.
- 4 (pha?oemulsif\* or phaco or phako).tw.
- 5 ((lens\* or capsul\*) adj4 (opaci\* or cloud\*)).tw.
- 6 (lensectom\* or capsulorrhesis or capsulorrhesis).tw.
- 7 (lens\* adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.
- 8 Lenses, Intraocular/
- 9 Lens Implantation, Intraocular/
- 10 ((lens\* adj4 (intraocul\* or implant\*)) or IOL\*).tw.
- 11 or/1-10
- 12 Ophthalmologic Surgical Procedures/ae [Adverse Effects]
- 13 Artificial Lens Implant Migration/
- 14 ((wrong\* or incorrect\* or erroneous or imprec\* or inaccura\* or unsuitabl\* or inappropriat\* or incompatibl\* or ill fit\*) adj4 (lens\* or IOL\* or implant\* or eye or site\* or power or patient or transcri\*)).tw.
- 15 ((implant\* or lens\* or power or transcri\*) adj4 (error\* or migrat\* or fail\* or fault\* or mistak\* or defect\*)).tw.
- 16 or/12-15
- 17 Medical Errors/
- 18 exp Medication Errors/
- 19 exp Diagnostic Errors/

**Medline Strategy, searched 11<sup>th</sup> December 2015**

**Database: Ovid MEDLINE(R) 1946 to May Week 4 2016**

**Search Strategy:**

- 20 ((medic\* or surg\* or operat\* or diagnos\* or healthcare or health care or treatment\* or therap\*) adj4 (error\* or fail\* or false or mistak\* or fault\* or defect\* or inappropriat\* or accident\*)).tw.
- 21 misdiagnos\*.tw.
- 22 exp Professional Competence/
- 23 ((profess\* or technical or clinical or general\* or staff) adj4 (competen\* or experienc\* or skill\* or appropriat\* or suitabl\* or proficien\* or expert\* or qualif\* or proper\*)).tw.
- 24 exp Malpractice/
- 25 (malpractice or negligen\*).tw.
- 26 (confus\* or disorganiz\* or disorganis\* or distract\*).tw.
- 27 (never adj4 event\*).tw.
- 28 Patient Safety/
- 29 Patient Harm/
- 30 ((patient\* or client\*) adj4 (safe\* or wellbeing or well being or protect\* or harm\* or damag\* or hurt\* or mistreat\* or maltreat\* or ill treat\*)).tw.
- 31 exp Safety Management/
- 32 ((safety or hazard\*) adj4 (manag\* or administ\* or report\* or record\* or control\* or assess\*)).tw.
- 33 Risk Management/
- 34 exp Risk Assessment/
- 35 ((risk\* or incident\*) adj4 (manag\* or administ\* or report\* or record\* or reduc\* or contract\* or abate\* or minimiz\* or minimis\* or lower\* or diminish\* or assess\* or estimat\* or apprais\* or adjust\*)).tw.
- 36 ((near or close or narrow) adj4 (miss\* or call\* or escape\*)).tw.
- 37 exp "Quality of Health Care"/st [Standards]
- 38 exp Quality Assurance, Healthcare/
- 39 (quality adj4 (assur\* or assess\* or control\*)).tw.
- 40 Checklist/
- 41 (checklist\* or check list\*).tw.
- 42 (world health organi?ation adj4 (surg\* or safe\* or tool\*)).tw.
- 43 exp Ophthalmologic Surgical Procedures/st [Standards]
- 44 Clinical Protocols/
- 45 ((clinic\* or treat\* or car\*) adj4 protocol\*).tw.
- 46 Practice Guidelines as Topic/
- 47 (practic\* adj4 (best or guid\*)).tw.
- 48 exp Patient Care Planning/
- 49 ((patient\* or care\*) adj4 (plan\* or goal\* or procedure\*)).tw.
- 50 ((critical or clinical or care) adj4 path\*).tw.
- 51 (standard operating procedure\* or SOP\*).tw.
- 52 ((strateg\* or procedur\* or process\* or protocol\* or scenario\*) adj4 (manag\* or administ\* or report\* or record\* or reduc\* or contract\* or abate\* or minimiz\* or minimis\* or lower\* or diminish\* or assess\* or estimat\* or apprais\*)).tw.
- 53 ((strateg\* or procedur\* or process\* or protocol\* or scenario\*) adj4 (risk\* or incident\*)).tw.
- 54 or/17-53
- 55 or/8-10
- 56 54 and 55
- 57 16 or 56
- 58 11 and 57
- 59 Animals/ not Humans/
- 60 58 not 59
- 61 limit 60 to english language



60 **D.2.6 Search strategy review questions 11 and 12**61 RQ11: What is the effectiveness of risk stratification techniques to reduce surgical  
62 complications and errors?63 RQ12: What are the risk factors associated with increased surgical complications and errors  
64 in cataract surgery?65 **Table 6: search strategy RQ11 and RQ12****Medline Strategy, searched 14<sup>th</sup> December 2015****Database: Ovid MEDLINE(R) 1946 to November Week 3 2015****Search Strategy:**

- 1 exp cataract extraction/
- 2 (pha?oemulsif\* or phaco or phako).tw.
- 3 (lensectom\* or capsulorhexis or capsulorrhesis).tw.
- 4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.
- 5 Lens Implantation, Intraocular/
- 6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.
- 7 or/1-6
- 8 risk assessment/
- 9 (Najjar adj1 Awwad).tw.
- 10 (risk\* adj4 (assess\* or score\* or scoring or stratif\* or predict\*)).tw.
- 11 (scor\* adj4 (system\* or stratif\* or complex\* or assess\* or calculat\* or predict\*)).tw.
- 12 ((surgery or surgical) adj4 (complex\* or difficult\* or grade\* or grading or stratif\* or score\* or scoring or predict\*)).tw.
- 13 risk factors/
- 14 (risk adj4 (factor\* or complicat\*)).tw.
- 15 predictor\*.tw.
- 16 (predict\* adj4 (model\* or analy\* or calculat\* or rule\*)).tw.
- 17 exp blood pressure/
- 18 ((blood or systolic or diastolic or pulse or intravasc\* or vasc\*) adj4 (pressure\* or tension)).tw.
- 19 normotension\*.tw.
- 20 International Normalized Ratio/
- 21 (international normali?ed ratio or INR).tw.
- 22 Blood Glucose/an [Analysis]
- 23 Glucose Tolerance Test/
- 24 ((blood or plasma or serum) adj4 (glucose or sugar\*) adj4 (test\* or analy\* or investigat\* or exam\* or confirm\*)).tw.
- 25 ((glucose?emia or glyco?emia or normoglyc?emia\*) adj4 (test\* or analy\* or investigat\* or exam\* or confirm\*)).tw.
- 26 (glucose adj4 (tolera\* or load\*) adj4 (test\* or curve or factor\*)).tw.
- 27 (OGTT or GTT or "g.t.t." or glucogram\*).tw.
- 28 (Tamsulosin or Bazetham or Contiflo or Cositam or Diffundox or Flomax\* or Galebon or Stronazon or Tabphyn or Tamfrex).tw.
- 29 (Losinate or Pinexel or Prosurin or Amsulosin or Alna or Hernal or Josir or Mecir or Omic or Omix or Omnic or Pradif or Secotex or Urolosin).tw.
- 30 warfarin/
- 31 (Warfarin or Marevan or Coumadin\* or Jantoven or Panwarfin or Sofarin).tw.
- 32 (Circuvit or Warfilone or Lawarin or Waran or Marfarin or Uniwarfin or Simarc-2 or Warfant).tw.
- 33 (Arefarin or Warlin or Orfarin or Romesa or Warik or Zyfarin or Varfine or Aldocumar or Tedicumar or Befarin or Cogulax).tw.

**Medline Strategy, searched 14<sup>th</sup> December 2015****Database: Ovid MEDLINE(R) 1946 to November Week 3 2015****Search Strategy:**

34 ((posterior or anterior) adj4 capsul\* adj4 (tear\* or rupture\*)).tw.  
 35 Axial Length, Eye/  
 36 (axial adj1 length).tw.  
 37 ((deep\* or increas\* depth\*) adj4 anterior chamber).tw.  
 38 myopia/  
 39 (myopia\* or myopy or nearsight\* or near-sight\* or shortsight\* or short-sight\*).tw.  
 40 macular degeneration/  
 41 (macula\* adj1 (degenerat\* or dystroph\* or atroph\*)).tw.  
 42 maculopath\*.tw.  
 43 Age Factors/  
 44 (age adj4 factor\*).tw.  
 45 Young Adult/  
 46 (young\* adj4 (adult\* or m?n or wom?n)).tw.  
 47 or/8-46  
 48 Male/  
 49 (male or m?n).tw.  
 50 48 or 49  
 51 exp Risk/  
 52 risk\*.tw.  
 53 51 or 52  
 54 50 and 53  
 55 47 or 54  
 56 7 and 55  
 57 Animals/ not Humans/  
 58 56 not 57  
 59 limit 58 to english language

**66 D.2.7 Search strategy review questions 14, 15 and 16**

67 RQ14: What is the optimal type and administration of anaesthesia for cataract surgery?

68 RQ15: What is the effectiveness of sedation as an adjunct to local anaesthesia during  
69 cataract surgery?70 RQ16: What is the effectiveness of hyaluronidase as an adjunct to local anaesthesia during  
71 cataract surgery?**72 Table 7: search strategy RQ14, RQ15 and RQ16****Medline Strategy, searched 4<sup>th</sup> August 2016****Database: Ovid MEDLINE(R) <1946 to July Week 4 2016>****Search Strategy:**

1 exp Cataract Extraction/  
 2 (pha?oemulsif\* or phaco or phako).tw.  
 3 (lensectom\* or capsulorrhexis or capsulorrhexis).tw.  
 4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.  
 5 Lens Implantation, Intraocular/  
 6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.  
 7 or/1-6

**Medline Strategy, searched 4<sup>th</sup> August 2016**

**Database: Ovid MEDLINE(R) <1946 to July Week 4 2016>**

**Search Strategy:**

- 8 exp "Anesthesia and Analgesia"/
- 9 exp Anesthetics/
- 10 Anesthesiology/
- 11 Nurse Anesthetists/
- 12 exp Analgesics/
- 13 (an?esth\* or analges\*).tw.
- 14 Nerve Block/
- 15 exp Autonomic Nerve Block/
- 16 (nerve\* adj4 block\*).tw.
- 17 (peribulbar\* or periocular\* or retrobulbar\* or intraconal\*).tw.
- 18 (sub-tenon\* or 'sub tenon\*' or subtenon\*).tw.
- 19 Pain Management/
- 20 ((pain\* or discomfort\*) adj4 (manag\* or reliev\* or relief\* or medic\* or control\* or contain\* or limit\* or regulat\* or repress\* or alleviat\* or respite\* or abat\*).tw.
- 21 Administration, Topical/
- 22 Administration, Ophthalmic/
- 23 exp Ophthalmic Solutions/
- 24 ((topical\* or ophthal\* or ocular or intraocular or conjunctiva\* or eye\*) adj4 (administ\* or drop\* or solution\* or applicat\*).tw.
- 25 (eyedrop\* or intracameral\* or intra-cameral\* or intra cameral\*).tw.
- 26 Lidocaine/
- 27 (Lidocaine or Lignocaine or Xylocaine or Octocaine).tw.
- 28 Bupivacaine/
- 29 (Bupivacaine or Marcain\*).tw.
- 30 Adjuvants, Anesthesia/
- 31 "Hypnotics and Sedatives"/
- 32 (sedat\* or neurosedat\* or hypnotic\* or soporofic\* or tranquillis\*).tw.
- 33 Midazolam/
- 34 (Midazolam or Buccolam or Versed or Dormicum).tw.
- 35 exp Fentanyl/
- 36 (Fentan\* or Alfentan\* or Sufentan\*).tw.
- 37 (Phentanyl or Sublimaze or Duragesic or Durogesic or Fentora).tw.
- 38 (Alfenta or Rapifen).tw.
- 39 (Zalviso or Sufenta).tw.
- 40 Propofol/
- 41 (Propofol or Diprivan or Propoven).tw.
- 42 Hyaluronoglucosaminidase/
- 43 (Hyaluronidas\* or Hyaluronoglucosaminidas\* or Hyalase).tw.
- 44 (Amphadase or Hydase or Hylenex or Vitrase or Wydase).tw.
- 45 Hyaluronic Acid/
- 46 (Hyaluronic adj4 acid).tw.
- 47 (Ocusan or Ophthalin or Oxyal or Provisc).tw.
- 48 (Hyaluronan or Healon or Hylase).tw.
- 49 (Sodium adj4 Hyaluronate).tw.
- 50 or/8-49
- 51 7 and 50
- 52 Animals/ not Humans/
- 53 51 not 52

**Medline Strategy, searched 4<sup>th</sup> August 2016**  
**Database: Ovid MEDLINE(R) <1946 to July Week 4 2016>**  
**Search Strategy:**

54 limit 53 to english language

73 *Note: In house RCT and systematic review filters appended to strategy.*

74 **D.2.8 Search strategy review question 17**

75 RQ17: In what circumstances should general anaesthesia be considered in  
 76 phacoemulsification cataract surgery?

77 **Table 8: search strategy RQ17**

**Medline Strategy, searched 9<sup>th</sup> August 2016**  
**Database: Ovid MEDLINE(R) <1946 to July Week 4 2016>**  
**Search Strategy:**

1 exp Cataract Extraction/  
 2 (pha?oemulsif\* or phaco or phako).tw.  
 3 (lensectom\* or capsulorhexis or capsulorrhesis).tw.  
 4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.  
 5 Lens Implantation, Intraocular/  
 6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.  
 7 or/1-6  
 8 exp Anesthesia, General/  
 9 exp Anesthetics, General/  
 10 ((general\* or inhal\* or gas\* or intravenous\* or drip\* or endovenous\* or dissociative or closed or rebreath\* or balanced or rectal or rectum) adj4 an?esth\*).tw.  
 11 or/8-10  
 12 7 and 11  
 13 Animals/ not Humans/  
 14 12 not 13  
 15 limit 14 to english language

78 **D.2.9 Search strategy review questions 18 and 19**

79 RQ18: Are different lens design (aspheric vs. spheric, plate vs. loop) effective in improving  
 80 postoperative vision (refractive outcomes, optical aberrations) in cataract surgery?

81 RQ19: Are different lens design (square-edged vs. round-edge, plate vs. loop) and material  
 82 (hydrophilic acrylic, hydrophobic acrylic, collagen, hydroxyethyl methacrylate-based vs.  
 83 silicone-based) effective in preventing posterior capsule opacification in cataract surgery?

84 **Table 9: search strategy RQ18 and RQ19**

**Medline Strategy, searched 20<sup>th</sup> April 2016**  
**Database: Ovid MEDLINE(R) 1946 to April Week 1 2016**  
**Search Strategy:**

1 exp Cataract Extraction/  
 2 (pha?oemulsif\* or phaco or phako).tw.  
 3 (lensectom\* or capsulorhexis or capsulorrhesis).tw.

<b>Medline Strategy, searched 20<sup>th</sup> April 2016</b> <b>Database: Ovid MEDLINE(R) 1946 to April Week 1 2016</b> <b>Search Strategy:</b>	
4	((lens* or cataract*) adj4 (extract* or aspirat* or operat* or remov* or surg* or excis* or emulsif* or implant*)).tw.
5	Lenses, Intraocular/
6	Lens Implantation, Intraocular/
7	((lens* adj4 intraocul*) or IOL*).tw.
8	or/1-7
9	Prosthesis Design/
10	Prosthesis Failure/
11	((lens* or IOL* or intraocul*) adj4 (design* or compos* or construct* or assembl*)).tw.
12	((spheric* or aspheric* or aberration free or aberration-free) adj4 (lens* or IOL* or intraocul* or design*)).tw.
13	((plate or loop or 3 piece or 3-piece or three piece or three-piece or haptic) adj4 (lens* or IOL* or intraocul* or design*)).tw.
14	((injectable or foldable) adj4 (lens* or IOL* or intraocul* or design*)).tw.
15	((square* or round* or optic* or sharp* or anterior* or curv* or cylind* or oval or ellip* or ocular* or point*) adj4 (edge* or corner* or margin* or tip*)).tw.
16	(edge* adj4 (profil* or design* or structur*)).tw.
17	((lens* or IOL* or intraocul*) adj4 (material* or substance* or component*)).tw.
18	exp Acrylic Resins/
19	exp Acrylates/
20	exp "Hydrophobic and Hydrophilic Interactions"/
21	exp Collagen/
22	exp Silicones/
23	((acryl* or polyacryl* or methacryl* or superacryl* or polymethylmethacryl* or PMMA*) adj4 (lens* or IOL* or intraocul* or design* or material*)).tw.
24	((hydrophil* or hydrophob*) adj4 (lens* or IOL* or intraocul* or design* or material*)).tw.
25	((collagen* or copolymer* or collamer*) adj4 (lens* or IOL* or intraocul* or design* or material*)).tw.
26	((hydroxyethylmethacryl* or "(Hydroxyethyl)methacryl*" or glycolmethacryl* or HEMA*) adj4 (lens* or IOL* or intraocul* or design* or material*)).tw.
27	(silicone* adj4 (lens* or IOL* or intraocul* or design* or material*)).tw.
28	or/9-27
29	8 and 28
30	Animals/ not Humans/
31	29 not 30
32	limit 31 to english language

85 *Note: In house RCT and systematic review filters appended to strategy.*

86 **D.2.10 Search strategy review question 20**

87 RQ20: Are tinted lenses effective in preventing the progression of age-related macular  
 88 degeneration compared with colourless lenses in cataract surgery?

89

**Table 10: search strategy RQ20**

Medline Strategy, searched 11 <sup>th</sup> May 2016	
Database: Ovid MEDLINE(R) 1946 to August Week 3 2016	
Search Strategy:	
1	exp Cataract Extraction/
2	(pha?oemulsif* or phaco or phako).tw.
3	(lensectom* or capsulorhexis or capsulorrhesis).tw.
4	((lens* or cataract*) adj4 (extract* or aspirat* or operat* or remov* or surg* or excis* or emulsif* or implant*)).tw.
5	Lenses, Intraocular/
6	Lens Implantation, Intraocular/
7	((lens* adj4 intraocul*) or IOL*).tw.
8	or/1-7
9	Color Vision/
10	Color Perception/
11	exp Filtration/
12	Light/
13	Color/
14	Ultraviolet Rays/
15	((blue or yellow or orange or ultraviolet or UV or violet or colo?*r*) adj4 (filter* or filtrat* or block* or prevent* or tint* or stain* or absorb* or capt* or lens* or IOL* or intraoc*)).tw.
16	((clear* or colo?rless or uncolo?*r* or non-colo?*r* or neutral or untint* or non-tint* or natural*) adj4 (lens* or IOL* or intraoc*)).tw.
17	((tint* or filter* or filtrat* or block* or absorb* or stain*) adj4 (lens* or IOL* or intraoc*)).tw.
18	(light* adj4 (tint* or filter* or filtrat* or block* or absorb* or stain*)).tw.
19	or/9-18
20	8 and 19
21	Animals/ not Humans/
22	20 not 21
23	limit 22 to english language

90

Note: In house RCT and systematic review filters appended to strategy.

### 91 D.2.11 Search strategy review question 22

92

RQ22: What is the optimal strategy to address pre-existing astigmatism in people undergoing cataract surgery?

93

94

**Table 11: search strategy RQ22**

Medline Strategy, searched 5 <sup>th</sup> April 2016	
Database: Ovid MEDLINE(R) 1946 to March Week 4 2016	
Search Strategy:	
1	exp Cataract Extraction/
2	(pha?oemulsif* or phaco or phako).tw.
3	(lensectom* or capsulorhexis or capsulorrhesis).tw.
4	((lens* or cataract*) adj4 (extract* or aspirat* or operat* or remov* or surg* or excis* or emulsif*)).tw.
5	Lens Implantation, Intraocular/
6	((lens* or IOL* or intraocul*) adj4 implant*).tw.
7	or/1-6
8	Astigmatism/
9	astigmat*.tw.

**Medline Strategy, searched 5<sup>th</sup> April 2016**  
**Database: Ovid MEDLINE(R) 1946 to March Week 4 2016**  
**Search Strategy:**

- 10 8 or 9
- 11 7 and 10
- 12 Animals/ not Humans/
- 13 11 not 12
- 14 limit 13 to english language

95 *Note: In house RCT and systematic review filters appended to strategy.*

96 **D.2.12 Search strategy review question 23**

97 RQ23: What is the effectiveness of interventions (for example, prophylactic laser surgery) to  
 98 prevent retinal detachment in people with myopia undergoing cataract surgery?

99 **Table 12: search strategy RQ23**

**Medline Strategy, searched 8<sup>th</sup> July 2016**  
**Database: Ovid MEDLINE(R) 1946 to June Week 5 2016**  
**Search Strategy:**

- 1 exp Cataract Extraction/
- 2 (pha?oemulsif\* or phaco or phako).tw.
- 3 (lensectom\* or capsulorrhexis or capsulorrhexis).tw.
- 4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.
- 5 Lens Implantation, Intraocular/
- 6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.
- 7 or/1-6
- 8 exp Myopia/
- 9 (myopi\* or near-sight\* or near sight\* or nearsight\* or short-sight\* or short sight\* or shortsight\*).tw.
- 10 ((short or near) adj4 (sight\* or eyesight\* or vision\* or visual\*)).tw.
- 11 or/8-10
- 12 Retinal Detachment/
- 13 ((retina\* or RPE) adj4 (detach\* or separat\* or shrink\* or ablat\* or sublat\* or amotio)).tw.
- 14 (RRD or ERD or SRD or TRD).tw.
- 15 Retinal Perforations/
- 16 ((retina\* or RPE or macular) adj4 (perforat\* or hole\* or dialys\* or tear\* or break\* or broke\* or ruptur\*)).tw.
- 17 ((lattice or retina\*) adj4 (degenerat\* or deter\* or atroph\* or decay\* or tear\* or hole\* or break\* or broke\* or perforat\*)).tw.
- 18 or/12-17
- 19 Cryotherapy/
- 20 Cryosurgery/
- 21 (cryotherap\* or cryosurg\* or cryoablat\* or cryotreat\*).tw.
- 22 ((cryo\* or cold\*) adj4 (therap\* or surg\* or ablat\* or treat\* or operat\* or excis\*)).tw.
- 23 exp Laser Therapy/
- 24 exp Lasers/
- 25 laser\*.tw.
- 26 (keratectom\* or photokeratectum\* or keratom\* or LASEK or LASIK or PRK).tw.
- 27 or/19-26

**Medline Strategy, searched 8<sup>th</sup> July 2016****Database: Ovid MEDLINE(R) 1946 to June Week 5 2016****Search Strategy:**

- 28 (prophyla\* or prevent\* or avoid\* or forestall\* or hamper\* or hinder\* or impede\* or inhibit\* or limit\* or protect\* or conserve\* or defend\* or secure\*).tw.
- 29 ((before\* or prior\* or ahead\* or previous\* to or preced\*) adj4 (surg\* or operat\* or ablat\* or excis\* or implant\*).tw.
- 30 Preoperative Period/  
31 Preoperative Care/  
32 (preop\* or pre-op\* or pre op\* or presurg\* or pre-surg\* or pre surg\*).tw.  
33 or/28-32  
34 27 and 33  
35 ((after\* or follow\* or subsequent\* to or succeeding or trail\* or post) and (laser\* or keratectom\* or photokeratectum\* or keratom\* or LASEK or LASIK or PRK)).tw.  
36 ((after\* or follow\* or subsequent\* to or succeeding or trail\* or post) and (cryotherap\* or cryosurg\* or cryoablat\* or cryotreat\*).tw.  
37 (((after\* or follow\* or subsequent\* to or succeeding or trail\* or post) and (cryo\* or cold\*)) adj4 (therap\* or surg\* or ablat\* or treat\* or operat\* or excis\*).tw.  
38 or/35-37  
39 18 or 34 or 38  
40 7 and 11 and 39  
41 Animals/ not Humans/  
42 40 not 41  
43 limit 42 to english language

**100 D.2.13 Search strategy review questions 24 and 25**

101 RQ24: What is the effectiveness of bilateral simultaneous (rapid sequential) cataract surgery  
102 compared with unilateral eye surgery?

103 RQ25: What is the appropriate timing of second eye surgery, taking into account issues such  
104 as refractive power after first eye surgery?

**105 Table 13: search strategy RQ24 and RQ25****Medline Strategy, searched 18<sup>th</sup> February 2016****Database: Ovid MEDLINE(R) 1946 to February Week 2 2016****Search Strategy:**

- 1 exp cataract extraction/  
2 (pha?oemulsif\* or phaco or phako).tw.  
3 (lensectom\* or capsulorhexis or capsulorrhesis).tw.  
4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*).tw.  
5 Lens Implantation, Intraocular/  
6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.  
7 or/1-6  
8 (simultaneous\* or concurrent\* or same time or same day or coincid\* or synchron\* or concurring or in sync).tw.  
9 ((rapid\* or immediat\* or accelerat\* or very quick\* or urgent\* or direct\*) adj4 (sequential\* or consecutiv\* or subsequent\* or chronologic\* or follow\*).tw.  
10 (ISBCS or ISCS).tw.  
11 ((delay\* or postpon\* or suspen\* or wait\* or defer\* or prolong\* or slow\*) adj4 (sequential\* or consecutiv\* or subsequent\* or chronologic\* or follow\*).tw.



**Medline Strategy, searched 18<sup>th</sup> February 2016**  
**Database: Ovid MEDLINE(R) 1946 to February Week 2 2016**  
**Search Strategy:**

12 (DSBCS or DSCS).tw.  
13 exp Functional Laterality/  
14 ((function\* or behavio?r\* or motor control\* or brain or cerebral) adj4 lateral\*).tw.  
15 ((ocular or eye\* or hemisphere\* or cerebral) adj4 (domina\* or preeminen\* or pre-eminen\* or suprem\* or superior\* or prefer\* or inclinat\* or predilect\* or priorit\*).tw.  
16 ((second\* or succeeding) adj4 eye\*).tw.  
17 Time Factors/  
18 Operative Time/  
19 ((surg\* or operat\*) adj4 (tim\* or duration)).tw.  
20 Anisometropia/  
21 anisometr\*.tw.  
22 (refract\* adj4 (inequal\* or differ\* or disparit\* or discrepant\* or diverg\* or variation or uneven or unevn\*).tw.  
23 Aniseikonia/  
24 aniseikonia\*.tw.  
25 (imag\* adj4 (siz\* or length\* or proport\* or width\* or dimension\*).tw.  
26 Vision, Binocular/  
27 (binocular adj4 (vision\* or sight\* or eye\* or visual\* or fusion\* or percept\* or view\*).tw.  
28 (reable\* or re-able\*).tw.  
29 ((support\* or encourag\* or aid\* or assist\* or help\* or bolster\* or boost\* or promot\*) adj4 (skills\* or abilit\* or competen\* or expert\* or proficien\* or prowess or capab\* or capacit\*).tw.  
30 exp Activities of Daily Living/  
31 (activ\* adj4 (dail\* or day-to-day or everyday or every day)).tw.  
32 (ADLs or ADL).tw.  
33 exp Self Care/  
34 (self\* adj4 (car\* or manag\*).tw.  
35 or/8-34  
36 7 and 35  
37 Animals/ not Humans/  
38 36 not 37  
39 limit 38 to english language

106 *Note: In house RCT and systematic review filters appended to strategy.*

107 **D.2.14 Search strategy review questions 26, 27 and 28**

108 RQ26: What is the effectiveness of capsular tension rings applied during phacoemulsification  
109 cataract surgery?

110 RQ27: What is the effectiveness of interventions to increase pupil size to improve visual  
111 outcomes and reduce complications during phacoemulsification cataract surgery?

112 RQ28: What is the effectiveness of postoperative eye shields to prevent complications after  
113 cataract extraction?

**Table 14: search strategy RQ26, RQ27 and RQ28**

Medline Strategy, searched 7 <sup>th</sup> November 2016	
Database: Ovid MEDLINE(R) 1946 to October Week 4 2016	
Search Strategy:	
1	exp Cataract Extraction/
2	(pha?oemulsif* or phaco or phako).tw.
3	(lensectom* or capsulorhexis or capsulorrhexis).tw.
4	((lens* or cataract*) adj4 (extract* or aspirat* or operat* or remov* or surg* or excis* or emulsif*)).tw.
5	Lens Implantation, Intraocular/
6	((lens* or IOL* or intraocul*) adj4 implant*).tw.
7	or/1-6
8	((Capsular* or tension*) adj4 (ring* or segment* or anchor*)).tw.
9	CTR.tw.
10	(cionni adj4 ring*).tw.
11	(PMMA adj4 ring*).tw.
12	(StabilEye* or Ringject or stableye*).tw.
13	Morcher*.tw.
14	Mydriatics/
15	(Intracameral* adj4 mydriatic*).tw.
16	ICM.tw.
17	Tropicamide/
18	(Tropicamide* or Mydral* or Mydriacyl* or Ocu-Tropic* or Tropicacyl*).tw.
19	Phenylephrine/
20	(Phenylephrine* or Prefrin* or AK-Dilate* or Altafrin* or "Murocoll 2" or Mydfrin* or Neofrin* or Ocu-Phrin*).tw.
21	Viscoelastic Substances/
22	Viscomydriasis*.tw.
23	Viscosupplements/
24	Viscosupplementation/
25	viscosupplement*.tw.
26	(ophthalmic* adj4 (viscosurgical* or viscoelastic*)).tw.
27	OVD.tw.
28	Hyaluronic Acid/
29	(sodium adj4 hyaluronate*).tw.
30	Hypromellose Derivatives/
31	(hydroxypropylmethylcellulose or (hydroxypropyl adj4 methylcellulose*)).tw.
32	Chondroitin Sulfate/
33	(chondroitin adj4 sulfate*).tw.
34	NaHa.tw.
35	HPMC.tw.
36	VISTHESIA.tw.
37	TWINVISC.tw.
38	COMBIVISC.tw.
39	Z-HYALIN*.tw.
40	Z-HYALCOAT*.tw.
41	Z-CELCOAT.tw.
42	Synechiolys*.tw.
43	(Pupillar* adj4 (membranectom* or (membran* adj4 (excis* or ablat* or cut*))))).tw.
44	Dilatation/
45	((Pupil* or iris*) adj4 (stretch* or expand* or expansion* or dilat*)).tw.

**Medline Strategy, searched 7<sup>th</sup> November 2016**  
**Database: Ovid MEDLINE(R) 1946 to October Week 4 2016**  
**Search Strategy:**

- 46 Siepser\*.tw.
- 47 Graether\*.tw.
- 48 "Perfect Pupil".tw.
- 49 "Oasis Iris\* Expander".tw.
- 50 (Malyugin adj4 ring\*).tw.
- 51 (iris\* adj4 hook\*).tw.
- 52 (sphincter\* adj4 (cut\* or excis\* or ablat\*)).tw.
- 53 (eye\* adj4 (shield\* or pad\* or patch\* or protect\* or bandage\*)).tw.
- 54 bandages/
- 55 eye protective devices/
- 56 or/8-55
- 57 7 and 56

115 *Note: In house RCT filter appended to strategy. In house observational studies and RCT filter appended to RQ27*  
 116 *strategy.*

117 **D.2.15 Search strategy review question 31**

118 RQ31: What is the effectiveness of interventions to reduce the impact of perioperative  
 119 posterior capsule rupture?

120 **Table 15: search strategy RQ31**

**Medline Strategy, searched 20<sup>th</sup> September 2016**  
**Database: Ovid MEDLINE(R) 1946 to September Week 1 2016**  
**Search Strategy:**

- 1 exp Cataract Extraction/
- 2 (pha?oemulsif\* or phaco or phako).tw.
- 3 (lensectom\* or capsulorhexis or capsulorrhesis).tw.
- 4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.
- 5 Lens Implantation, Intraocular/
- 6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.
- 7 or/1-6
- 8 Posterior Capsular Rupture, Ocular/
- 9 Posterior Capsule of the Lens/
- 10 Rupture/
- 11 ((posterior\* or lens\*) adj4 capsul\* adj4 (rupture\* or tear\* or rent\* or breach\*)).tw.
- 12 PCR.tw.
- 13 Vitrectomy/
- 14 vitrectom\*.tw.
- 15 Vitreous Body/su [Surgery]
- 16 (vitreous adj4 (resect\* or remov\* or extract\*)).tw.
- 17 exp Triamcinolone/
- 18 (triamcinolone\* or ad cortyl or kenalog or ledercort or lederspan or nasacort or volon).tw.
- 19 (triesence or kenacort or triam or trivaris).tw.
- 20 (posterior\* adj4 (capsulorhexis or capsulorrhesis)).tw.
- 21 (anterior\* adj4 chamber\* adj4 (lens\* or IOL\* or intraocular\*)).tw.

**Medline Strategy, searched 20<sup>th</sup> September 2016**  
**Database: Ovid MEDLINE(R) 1946 to September Week 1 2016**  
**Search Strategy:**

22 ((back or posterior or rear) adj4 (pol\* or eye)).tw.  
 23 or/8-22  
 24 exp Tissue Adhesives/  
 25 Fibrin Tissue Adhesive/  
 26 (adhesive\* or glue\* or seal\*).tw.  
 27 (Fibrin or Tisseel or Tissucol).tw.  
 28 (lens\* or IOL\* or intraocular\*).tw.  
 29 or/24-28  
 30 Tissue Scaffolds/  
 31 scaffold\*.tw.  
 32 30 or 31  
 33 29 and 32  
 34 exp "Anesthesia and Analgesia"/  
 35 exp Anesthetics/  
 36 Anesthesiology/  
 37 Nurse Anesthetists/  
 38 exp Analgesics/  
 39 (an?esth\* or analges\*).tw.  
 40 or/34-39  
 41 exp Intraoperative Complications/  
 42 exp Postoperative Complications/  
 43 ((perioperative\* or peri-operative\* or peroperative\* or per-operative\* or intraoperative\* or intra-operative\* or postoperative or post-operative\*) adj4 (complicat\* or complexit\* or difficult\* or problem\* or injur\* or harm\* or undesirabl\*)).tw.  
 44 exp Eye Injuries/  
 45 ((eye\* or surg\* or ocular\* or oculus or optic\*) adj4 (injur\* or wound\* or damag\* or trauma\* or lesion\* or lacerat\*)).tw.  
 46 or/41-45  
 47 40 and 46  
 48 23 or 33 or 47  
 49 7 and 48  
 50 Animals/ not Humans/  
 51 49 not 50  
 52 limit 51 to english language

121  
122

*Note: In house RCT and systematic review filters appended to strategy. Date limit of 1990 onwards. Any papers published before 1990 were removed in reference management software.*

123 **D.2.16 Search strategy review question 32**

124 RQ32: What is the effectiveness of interventions used to manage cystoid macular oedema  
 125 following cataract surgery?

126 **Table 16: search strategy RQ32**

**Medline Strategy, searched 18<sup>th</sup> October 2016**  
**Database: Ovid MEDLINE(R) 1946 to October Week 1 2016**  
**Search Strategy:**

1 exp Cataract Extraction/  
 2 (pha?oemulsif\* or phaco or phako).tw.  
 3 (lensectom\* or capsulorhexis or capsulorrhesis).tw.

**Medline Strategy, searched 18<sup>th</sup> October 2016****Database: Ovid MEDLINE(R) 1946 to October Week 1 2016****Search Strategy:**

- 4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.
- 5 Lens Implantation, Intraocular/
- 6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.
- 7 or/1-6
- 8 exp Macula Lutea/
- 9 Macular Edema/
- 10 (macula\* adj4 (edema\* or oedema\* or dystroph\*)).tw.
- 11 (central\* adj4 (retina\* or fovea\*) adj4 (edema\* or oedema\* or dystroph\*)).tw.
- 12 (macula\* adj4 (swell\* or bulg\* or enlarg\* or expand\* or fatten\* or thick\* or congeal\*)).tw.
- 13 (Irvine-Gass adj4 syndrome\*).tw.
- 14 exp Anti-Inflammatory Agents/
- 15 (anti-inflam\* or antiinflam\* or anti-rheumat\* or anitrheumat\* or anti-phlogist\* or antiphlogist\*).tw.
- 16 (NSAID\* or SAID or SAIDs).tw.
- 17 (aspirin-like adj4 (agent\* or drug\* or medic\* or analgesic\*)).tw.
- 18 Acetazolamide/
- 19 (Acetazolam\* or Diamox or Eytazox).tw.
- 20 (Ak-Zol or AkZol or AZM-Tab or Dazamide or Storzolamide).tw.
- 21 (Diacarb or Diuramide or Defiltran or Edemox or Glaupax or Huma-Zolamide or HumaZolamide).tw.
- 22 or/8-21
- 23 exp Steroids/
- 24 exp Adrenal Cortex Hormones/
- 25 (steroid\* or cyclosteroid\*).tw.
- 26 (corticosteroid\* or corticoid\* or adrenocorticosteroid\* or hydroxycorticosteroid\* or ketosteroid\*).tw.
- 27 (glucocorticoid\* or glucorticoid\* or glycocorticoid\* or glucocorticoidsteroid\* or glucocorticosteroid\*).tw.
- 28 or/23-27
- 29 (ocular or intraocular or periocular or topical or systemic or eye\* or intravitreal\* or intra vitreal\*).tw.
- 30 28 and 29
- 31 exp Vascular Endothelial Growth Factors/ai [Antagonists & Inhibitors]
- 32 ((vascular\* or endothelial\* or VEGF\* or vasculotropin) adj4 (anti\* or block\* or bar\* or impede\* or inhibit\* or constrain\* or curb\* or hinder\* or obstruct\* or suppress\* or restrain\* or intravitreal\* or intra vitreal\*)).tw.
- 33 antivasculat\*.tw.
- 34 Angiogenesis Inhibitors/
- 35 ((angiogen\* or angiost\* or anti angiogen\* or antiangiogen\* or neovascular\*) adj4 (inhibit\* or agent\* or drug\* or medic\* or antagonist\* or effect\*)).tw.
- 36 Bevacizumab/
- 37 (Becvacizumab or Avastin).tw.
- 38 Ranibizumab/
- 39 (Ranibizumab or Lucentis or RhuFab).tw.
- 40 Vitrectomy/
- 41 vitrectom\*.tw.
- 42 Vitreous Body/su [Surgery]
- 43 (vitreous adj4 (resect\* or remov\* or extract\*)).tw.

**Medline Strategy, searched 18<sup>th</sup> October 2016**  
**Database: Ovid MEDLINE(R) 1946 to October Week 1 2016**  
**Search Strategy:**

- 44 or/31-43
- 45 22 or 30 or 44
- 46 7 and 45
- 47 Animals/ not Humans/
- 48 46 not 47
- 49 limit 48 to english language

127 *Note: In house RCT and systematic review filters appended to strategy. Date limit of 1990 onwards. Any papers*  
 128 *published before 1990 were removed in reference management software.*

129 **D.2.17 Search strategy review question 33**

130 RQ33: What are the early and late complications of cataract surgery?

131 **Table 17: search strategy RQ33**

**Medline Strategy, searched 11<sup>th</sup> October 2016**  
**Database: Ovid MEDLINE(R) 1946 to September Week 4 2016**  
**Search Strategy:**

- 1 exp cataract extraction/
- 2 (pha?oemulsif\* or phaco or phako).tw.
- 3 (lensectom\* or capsulorhexis or capsulorrhesis).tw.
- 4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.
- 5 Lens Implantation, Intraocular/
- 6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.
- 7 or/1-6
- 8 \*Intraoperative Complications/
- 9 \*Postoperative Complications/
- 10 ((surg\* or operat\* or intraoperat\* or postoperat\*) adj2 (complicat\* or injur\* or advers\* or detriment\* or unfortunat\* or undesirabl\* or side effect\* or harm\*)).tw.
- 11 ((medic\* or postsurg\* or preoperat\* or perioperat\* or peroperat\*) adj2 (complicat\* or injur\* or advers\* or detriment\* or unfortunat\* or undesirabl\* or side effect\* or harm\*)).tw.
- 12 ((wound\* or injur\*) adj2 (burn\* or scorch\* or leak\* or drip\*)).tw.
- 13 ((iris\* or irides) adj4 (damag\* or injur\* or wound\* or harm\* or impair\*)).tw.
- 14 Posterior Capsular Rupture, Ocular/
- 15 Anterior Capsular Rupture, Ocular/
- 16 Capsule Opacification/
- 17 ((posterior or anterior) adj2 capsul\* adj2 (tear\* or ruptur\* or opacification or crack\* or breach\* or lacerat\* or fissure\* or split\* or gash\* or scratch\* or clog\*)).tw.
- 18 (capsul\* adj4 (block\* or phimos\*)).tw.
- 19 (zonul\* adj4 (ruptur\* or disinsert\*)).tw.
- 20 (drop\* adj4 nucleus).tw.
- 21 (vitre\* adj4 (los\* or deficienc\* or deplet\*)).tw.
- 22 exp Eye Hemorrhage/
- 23 Retrobulbar Hemorrhage/
- 24 ((eye\* or ocular\* or intraocular\* or choroid\* or suprachoroid\* or retina\* or retrobulbar\* or retroorbital\* or vitre\*) adj2 (h?emorrhag\* or bleed\* or h?ematoma\* or effus\* or efflu\*)).tw.
- 25 (hyph?ema\* or h?emophthalmos).tw.
- 26 (aqueous adj4 misdirect\*).tw.
- 27 Ocular Hypertension/

**Medline Strategy, searched 11<sup>th</sup> October 2016****Database: Ovid MEDLINE(R) 1946 to September Week 4 2016****Search Strategy:**

- 28 ((ocular\* or intraocular\* or eye\*) adj4 hypertension\*).tw.
- 29 ((rais\* or height\* or lift\* or increas\*) adj4 (ocular\* or intraocular\* or eye\*) adj4 (pressur\* or strain\* or tension\* or stress\*)).tw.
- 30 exp Lens Subluxation/
- 31 (lens\* adj4 (subluxation\* or dislocat\* or displac\* or seperat\* or malposit\*)).tw.
- 32 Corneal Edema/co, su [Complications, Surgery]
- 33 (((cystoid macula\* or cornea\*) adj2 (oedema\* or edema\* or dystroph\* or hydration or swell\*)) and (complicat\* or injur\* or advers\* or detriment\* or unfortunat\* or undesirabl\* or side effect\* or harm\*)).tw.
- 34 (Irvine Gass adj4 syndrome\*).tw.
- 35 (decentration or hypopion or sympathetic).tw.
- 36 ((contralateral or unoperated) adj4 eye\*).tw.
- 37 (refract\* adj4 (surpris\* or disappoint\* or bewilder\* or constern\* or disillus\* or discontent\* or dissatisfact\* or frustrat\* or regret\*)).tw.
- 38 ((glob\* or ocular\* or block\*) adj4 (perforat\* or puncture\* or prick\*)).tw.
- 39 Syncope, Vasovagal/
- 40 ((vaso\* or vagal\* or neurocardiogen\* or neurogen\* or neutrally mediated or cerebral or supine) adj2 (syncope\* or faint\* or respons\* or episod\* or attack\*)).tw.
- 41 Diplopia/
- 42 (diplopia\* or polyopsia\*).tw.
- 43 (double adj4 vision).tw.
- 44 Optic Neuropathy, Ischemic/
- 45 (isch?emi\* adj4 optic neuropath\*).tw.
- 46 dysphotopsia\*.tw.
- 47 ((unexplain\* or unidentif\* or myster\* or baffl\* or inexplic\* or mystif\* or perplex\* or puzzl\*) adj4 (poor\* or insuffic\* or mediocre or modest\* or substandard or unsatisfact\* or weak\* or subnorm\* or impair\* or diminish\* or reduc\* or low\* or decreas\* or less\*) adj4 (vision\* or eye\* or sight\* or visual\*)).tw.
- 48 exp Uveitis/co [Complications]
- 49 ((uveiti\* or panuveiti\*) and (complicat\* or injur\* or advers\* or detriment\* or unfortunat\* or undesirabl\* or side effect\* or harm\*)).tw.
- 50 Retinal Detachment/co [Complications]
- 51 (((retina\* or RPE) adj2 (detach\* or ablat\* or separat\* or sublat\*)) and (complicat\* or injur\* or advers\* or detriment\* or unfortunat\* or undesirabl\* or side effect\* or harm\*)).tw.
- 52 exp Endophthalmitis/co, su [Complications, Surgery]
- 53 ((endophthalmiti\* or ophthalmia\*) and (complicat\* or injur\* or advers\* or detriment\* or unfortunat\* or undesirabl\* or side effect\* or harm\*)).tw.
- 54 exp Death/
- 55 exp Mortality/
- 56 (death or dead or died or dying or fatalit\* or decease\* or mortalit\*).tw.
- 57 or/8-56
- 58 exp Anesthesia/
- 59 exp Anesthetics/
- 60 Anesthesiology/
- 61 an?esth\*.tw.
- 62 Conscious Sedation/
- 63 Deep Sedation/
- 64 ((conscious or moderate or procedur\* or deep) adj4 sedat\*).tw.
- 65 Anesthesia Recovery Period/

**Medline Strategy, searched 11<sup>th</sup> October 2016**  
**Database: Ovid MEDLINE(R) 1946 to September Week 4 2016**  
**Search Strategy:**

- 66 Nurse Anesthetists/
- 67 exp Analgesia/
- 68 exp Analgesics/
- 69 (analgesi\* or anodyne\* or antinociceptiv\*).tw.
- 70 exp Macular Degeneration/
- 71 (macula\* adj4 (degenerat\* or atroph\*)).tw.
- 72 (age related adj4 maculopath\*).tw.
- 73 (AMD or ARMD).tw.
- 74 Diabetic Retinopathy/
- 75 (diabet\* adj2 (retinopath\* or retinitis or eye diseas\*)).tw.
- 76 exp Informed Consent/
- 77 Presumed Consent/
- 78 (consent\* or agree\* or acquiesce\* or accept\* or assent\* or sanction\*).tw.
- 79 or/58-78
- 80 (complicat\* or injur\* or advers\* or detriment\* or unfortunat\* or side effect\* or harm\* or undesirabl\* or toxic\*).tw.
- 81 79 and 80
- 82 57 or 81
- 83 7 and 82
- 84 Animals/ not Humans/
- 85 83 not 84
- 86 limit 85 to english language

132 *Note: In house RCT and systematic review filters appended to strategy.*

133 **D.2.18 Search strategy review questions 34, 35, 36, 37 and 38**

134 RQ34: What should the postoperative assessment include?

135 RQ35: Who and in what setting should carry out the postoperative assessment?

136 RQ36: What issues should be considered when organising postoperative care?

137 RQ37: What is the appropriate time to assess outcomes in the postoperative period?

138 RQ38: If the postoperative assessment and care are undertaken outside of the hospital, how  
 139 should outcomes between surgical units and these providers be effectively communicated?

140 **Table 18: search strategy RQ34, RQ35, RQ36, RQ37 and RQ38**

**Medline Strategy, searched 20<sup>th</sup> September 2016**  
**Database: Ovid MEDLINE(R) 1946 to September Week 2 2016**  
**Search Strategy:**

- 1 exp Cataract Extraction/
- 2 (pha?oemulsif\* or phaco or phako).tw.
- 3 (lensectom\* or capsulorhexis or capsulorrhesis).tw.
- 4 ((lens\* or cataract\*) adj4 (extract\* or aspirat\* or operat\* or remov\* or surg\* or excis\* or emulsif\*)).tw.
- 5 Lens Implantation, Intraocular/
- 6 ((lens\* or IOL\* or intraocul\*) adj4 implant\*).tw.
- 7 or/1-6
- 8 exp Postoperative Period/



**Medline Strategy, searched 20<sup>th</sup> September 2016**  
**Database: Ovid MEDLINE(R) 1946 to September Week 2 2016**  
**Search Strategy:**

- 9 Postoperative Care/
- 10 ((postop\* or post-op\* or post op\*) adj4 (car\* or procedur\* or period\* or assess\* or recover\* or outcome\* or order\* or manag\* or direct\* or protocol\* or method\* or techniq\* or plan\*)).tw.
- 11 ((after or follow\*) adj4 car\*).tw.
- 12 or/8-11
- 13 7 and 12
- 14 animals/ not humans/
- 15 13 not 14
- 16 limit 15 to english language

141 *Note: In house qualitative filter appended to strategy. Date limit of 1990 onwards. Any papers published before*  
 142 *1990 were removed in reference management software. Results presented to analyst with and without appended*  
 143 *qualitative filter.*

144 **D.3 Cochrane search strategies**

145 **Table 19: Cochrane strategy RQ13**

**RQ13: What is the effectiveness of laser phacoemulsification compared with ultrasound phacoemulsification?**

**Search Strategy (taken from Cochrane '[Laser-assisted cataract surgery versus standard ultrasound phacoemulsification cataract surgery systematic review](#)' systematic review):**

- 1. randomized controlled trial.pt.
- 2. (randomized or randomised).ab,ti.
- 3. placebo.ab,ti.
- 4. dt.fs.
- 5. randomly.ab,ti.
- 6. trial.ab,ti.
- 7. (group or groups).ab,ti.
- 8. or/1-7
- 9. exp animals/
- 10. exp humans/
- 11. 9 not (9 and 10)
- 12. 8 not 11
- 13. phacoemulsification/
- 14. pha?oemulsif\$.tw.
- 15. (phaco or phako).tw.
- 16. capsulorhexis/
- 17. (capsulor?hexis\$ or capsulotom\$).tw.
- 18. or/13-17
- 19. exp lasers/
- 20. laser\$.tw.
- 21. femtosecond.tw.
- 22. (lensx or lensar or victus).tw.
- 23. or/19-22
- 24. 18 and 23
- 25. 12 and 24

146

**Table 20: Cochrane strategy RQ21**

**RQ21: What is the optimal strategy to facilitate simultaneous distance and near vision following cataract surgery?**  
**Search Strategy (taken from Cochrane '[Multifocal versus monofocal intraocular lenses after cataract extraction](#)' systematic review):**

1. randomised controlled trial.pt.
2. (randomised or randomised).ab,ti.
3. placebo.ab,ti.
4. dt.fs.
5. randomly.ab,ti.
6. trial.ab,ti.
7. groups.ab,ti.
8. or/1-7
9. exp animals/
10. exp humans/
11. 9 not (9 and 10)
12. 8 not 11
13. exp cataract extraction/
14. exp pseudophakia/
15. ((extract\$ or aspirat\$ or operat\$ or remov\$ or surg\$ or excis\$) adj3 cataract\$).tw.
16. pseudophakia.tw.
17. or/13-16
18. exp lens implantation intraocular/
19. exp lenses intraocular/
20. ((intraocular or intra ocular) adj3 lens\$).tw.
21. or/17-20
22. (multifocal or multi focal or bifocal or bi focal or diffractive or refractive).tw.
23. 21 and 22
24. 17 and 23
25. 12 and 24

147

**Table 21: Cochrane strategy RQ29**

**R29: What is the effectiveness of prophylactic antiseptics (for example, topical iodine) and antibiotics to prevent endophthalmitis after cataract surgery?**  
**Search Strategy (taken from Cochrane '[Perioperative antibiotics for prevention of acute endophthalmitis after cataract surgery](#)' systematic review):**

1. randomized controlled trial.pt.
2. (randomized or randomised).ab,ti.
3. placebo.ab,ti.
4. dt.fs.
5. randomly.ab,ti.
6. trial.ab,ti.
7. groups.ab,ti.
8. or/1-7
9. exp animals/
10. exp humans/
11. 9 not (9 and 10)
12. 8 not 11
13. exp ophthalmologic surgical procedure/
14. exp cataract/
15. exp cataract extraction/

**R29: What is the effectiveness of prophylactic antiseptics (for example, topical iodine) and antibiotics to prevent endophthalmitis after cataract surgery?**

**Search Strategy (taken from Cochrane '[Perioperative antibiotics for prevention of acute endophthalmitis after cataract surgery](#) systematic review'):**

16. ((cataract\$ adj3 extract\$) or aspirat\$ or operat\$ or remov\$ or surg\$ or excis\$ or implant\$).tw.
17. ((lens\$ adj3 extract\$) or aspirat\$ or operat\$ or remov\$ or surg\$ or excis\$ or implant\$).tw.
18. pha?oemulsif\$.tw.
19. lensectomy.tw.
20. or/13-19
21. exp endophthalmitis/
22. endophthalmitis.tw.
23. ophthalmia.tw.
24. or/21-23
25. exp anti bacterial agents/
26. antibiotic\$.tw.
27. bacteri\$.tw.
28. chloramphenicol\$.tw.
29. exp ciprofloxacin/
30. ciprofloxacin.tw.
31. (fusidic adj2 acid\$).tw.
32. exp gentamicin/
33. gentamicin\$.tw.
34. exp levofloxacin/
35. levofloxacin\$.tw.
36. neomycin\$.tw.
37. ofloxacin\$.tw.
38. (polymyxin\$ adj1 B).tw.
39. cefazolin\$.tw.
40. exp cefuroxime/
41. cefuroxime\$.tw.
42. moxifloxacin\$.tw.
43. norfloxacin\$.tw.
44. exp vancomycin/
45. vancomycin\$.tw.
46. or/21-45
47. exp antibiotic prophylaxis/
48. prophyla\$.tw.
49. prevent\$.tw.
50. or/47-49
51. 20 and 24 and 46
52. 50 and 51
53. 12 and 52

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**Table 22: Cochrane strategy RQ30**

**RQ30: What is the effectiveness of prophylactic topical corticosteroids and/or NSAIDs to prevent inflammation and cystoid macular oedema after cataract surgery?**

**Search Strategy: (taken from Cochrane '[Prophylactic non-steroidal anti-inflammatory drugs for the prevention of macular oedema after cataract surgery](#) systematic review')**

1. randomized controlled trial.pt.

**RQ30: What is the effectiveness of prophylactic topical corticosteroids and/or NSAIDs to prevent inflammation and cystoid macular oedema after cataract surgery?**

**Search Strategy:** (taken from Cochrane '[Prophylactic non-steroidal anti-inflammatory drugs for the prevention of macular oedema after cataract surgery](#) systematic review')

2. (randomized or randomised).ab,ti.
3. placebo.ab,ti.
4. dt.fs.
5. randomly.ab,ti.
6. trial.ab,ti.
7. groups.ab,ti.
8. or/1-7
9. exp animals/
10. exp humans/
11. 9 not (9 and 10)
12. 8 not 11
13. exp macular edema cystoid/
14. exp macula lutea/
15. (macula\$ adj3 oedema).tw.
16. (macula\$ adj3 edema).tw.
17. (CME or CMO).tw.
18. or/13-17
19. exp anti inflammatory agents non steroidal/
20. nsaid\$.tw.
21. nonsteroidal anti-inflammator\$.tw.
22. non-steroidal anti-inflammator\$.tw.
23. exp diclofenac/
24. diclofenac\$.tw.
25. fenoprofen\$.tw.
26. flurbiprofen\$.tw.
27. exp indometacin/
28. indometacin\$.tw.
29. exp ketoprofen/
30. ketoprofen\$.tw.
31. ketorolac\$.tw.
32. piroxicam\$.tw.
33. or/19-32
34. 18 and 33
35. 12 and 34

## 149 D.4 Study Design Filters

### 150 Table 23: study design filters

The MEDLINE SR, RCT, observational studies, qualitative and patient issues filters are presented below. They were translated for use in the MEDLINE In-Process and Embase databases.

#### **Systematic review**

1. Meta-Analysis.pt.
2. Meta-Analysis as Topic/

**The MEDLINE SR, RCT, observational studies, qualitative and patient issues filters are presented below. They were translated for use in the MEDLINE In-Process and Embase databases.**

3. Review.pt.
4. exp Review Literature as Topic/
5. (metaanaly\$ or metanaly\$ or (meta adj3 analy\$)).tw.
6. (review\$ or overview\$).ti.
7. (systematic\$ adj5 (review\$ or overview\$)).tw.
8. ((quantitative\$ or qualitative\$) adj5 (review\$ or overview\$)).tw.
9. ((studies or trial\$) adj2 (review\$ or overview\$)).tw.
10. (integrat\$ adj3 (research or review\$ or literature)).tw.
11. (pool\$ adj2 (analy\$ or data)).tw.
12. (handsearch\$ or (hand adj3 search\$)).tw.
13. (manual\$ adj3 search\$).tw.
14. or/1-13
15. animals/ not humans/
16. 14 not 15

#### **RCT**

1. Randomized Controlled Trial.pt.
2. Controlled Clinical Trial.pt.
3. Clinical Trial.pt.
4. exp Clinical Trials as Topic/
5. Placebos/
6. Random Allocation/
7. Double-Blind Method/
8. Single-Blind Method/
9. Cross-Over Studies/
10. ((random\$ or control\$ or clinical\$) adj3 (trial\$ or stud\$)).tw.
11. (random\$ adj3 allocat\$).tw.
12. placebo\$.tw.
13. ((singl\$ or doubl\$ or trebl\$ or tripl\$) adj (blind\$ or mask\$)).tw.
14. (crossover\$ or (cross adj over\$)).tw.
15. or/1-14
16. animals/ not humans/
17. 15 not 16

#### **Observational studies**

- 1 Observational Studies as Topic/ (1963)
- 2 Observational Study/ (31665)
- 3 Epidemiologic Studies/ (7368)
- 4 exp Case-Control Studies/ (834658)
- 5 exp Cohort Studies/ (1624051)
- 6 Cross-Sectional Studies/ (235120)
- 7 Controlled Before-After Studies/ (220)
- 8 Historically Controlled Study/ (97)
- 9 Interrupted Time Series Analysis/ (245)
- 10 Comparative Study.pt. (1770070)
- 11 case control\$.tw. (90405)
- 12 case series.tw. (42728)

**The MEDLINE SR, RCT, observational studies, qualitative and patient issues filters are presented below. They were translated for use in the MEDLINE In-Process and Embase databases.**

- 13 (cohort adj (study or studies)).tw. (111014)
- 14 cohort analy\$.tw. (4593)
- 15 (follow up adj (study or studies)).tw. (40037)
- 16 (observational adj (study or studies)).tw. (57432)
- 17 longitudinal.tw. (157923)
- 18 prospective.tw. (400420)
- 19 retrospective.tw. (324288)
- 20 cross sectional.tw. (201959)
- 21 or/1-20 (3732055)

**Qualitative**

- 1 Qualitative Research/
- 2 Nursing Methodology Research/
- 3 Interview.pt.
- 4 exp Interviews as Topic/
- 5 Questionnaires/
- 6 Narration/
- 7 Health Care Surveys/
- 8 (qualitative\$ or interview\$ or focus group\$ or questionnaire\$ or narrative\$ or narration\$ or survey\$).tw.
- 9 (ethno\$ or emic or etic or phenomenolog\$ or grounded theory or constant compar\$ or (thematic\$ adj4 analys\$) or theoretical sampl\$ or purposive sampl\$).tw.
- 10 (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.
- 11 (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$ or metathem\$ or meta-them\$).tw.
- 12 "critical interpretive syntheses\*".tw.
- 13 (realist adj (review\* or syntheses\*)).tw.
- 14 (noblit and hare).tw.
- 15 (meta adj (method or triangulation)).tw.
- 16 (CERQUAL or CONQUAL).tw.
- 17 ((thematic or framework) adj syntheses\*).tw.
- 18 or/1-17

**Patient issues**

- 1 qualitative research/
- 2 nursing methodology research/
- 3 exp interviews as topic/
- 4 questionnaires/
- 5 narration/
- 6 health care surveys/
- 7 (qualitative\$ or interview\$ or focus group\$ or questionnaire\$ or narrative\$ or narration\$ or survey\$).tw.
- 8 (ethno\$ or emic or etic or phenomenolog\$ or grounded theory or constant compar\$ or (thematic\$ adj4 analys\$) or theoretical sampl\$ or purposive sampl\$).tw.
- 9 (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.

**The MEDLINE SR, RCT, observational studies, qualitative and patient issues filters are presented below. They were translated for use in the MEDLINE In-Process and Embase databases.**

- 10 (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$ or metathem\$ or meta-them\$).tw.
- 11 "critical interpretive synthes\*".tw.
- 12 (realist adj (review\* or synthes\*)).tw.
- 13 (noblit and hare).tw.
- 14 (meta adj (method or triangulation)).tw.
- 15 (CERQUAL or CONQUAL).tw.
- 16 ((thematic or framework) adj synthes\*).tw.
- 17 or/1-16
- 18 exp Patients/px
- 19 exp Family/px
- 20 Caregivers/px
- 21 ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or in-patient\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$) adj6 (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.
- 22 Stress, Psychological/
- 23 Adaptation, psychological/
- 24 emotions/
- 25 anxiety/
- 26 fear/
- 27 exp consumer satisfaction/
- 28 patient\* report\* outcome\*.tw.
- 29 or/18-28
- 30 exp patients/
- 31 exp family/
- 32 caregivers/
- 33 (patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or in-patient\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$).ti.
- 34 or/30-33
- 35 pamphlets/
- 36 needs assessment/
- 37 information centers/
- 38 information services/
- 39 health education/
- 40 information dissemination/
- 41 counseling/
- 42 social support/
- 43 self-help groups/
- 44 self care/
- 45 ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj6 (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.

**The MEDLINE SR, RCT, observational studies, qualitative and patient issues filters are presented below. They were translated for use in the MEDLINE In-Process and Embase databases.**

- 46 ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj6 (counsel\$ or selfhelp\$ or self-help\$ or self help\$ or selfcar\$ or self-car\$ or self car\$)).ti.
- 47 patient education as topic/  
48 patient education handout/  
49 consumer health information/  
50 patient\* diar\*.tw.  
51 or/35-50  
52 34 and 51  
53 17 or 29 or 52  
54 animals/ not humans/  
55 53 not 54  
56 qualitative research/  
57 nursing methodology research/  
58 exp interviews as topic/  
59 questionnaires/  
60 narration/  
61 health care surveys/  
62 (qualitative\$ or interview\$ or focus group\$ or questionnaire\$ or narrative\$ or narration\$ or survey\$).tw.  
63 (ethno\$ or emic or etic or phenomenolog\$ or grounded theory or constant compar\$ or (thematic\$ adj4 analys\$) or theoretical sampl\$ or purposive sampl\$).tw.  
64 (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.  
65 (metasynthes\$ or meta-synthes\$ or metasummar\$ or meta-summar\$ or metastud\$ or meta-stud\$ or metathem\$ or meta-them\$).tw.  
66 "critical interpretive syntheses\*".tw.  
67 (realist adj (review\* or syntheses\*)).tw.  
68 (noblit and hare).tw.  
69 (meta adj (method or triangulation)).tw.  
70 (CERQUAL or CONQUAL).tw.  
71 ((thematic or framework) adj syntheses\*).tw.  
72 or/56-71  
73 exp Patients/px  
74 exp Family/px  
75 Caregivers/px  
76 ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or in-patient\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$) adj6 (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.  
77 Stress, Psychological/  
78 Adaptation, psychological/  
79 emotions/  
80 anxiety/  
81 fear/  
82 exp consumer satisfaction/  
83 patient\* report\* outcome\*.tw.



**The MEDLINE SR, RCT, observational studies, qualitative and patient issues filters are presented below. They were translated for use in the MEDLINE In-Process and Embase databases.**

84 or/73-83  
 85 exp patients/  
 86 exp family/  
 87 caregivers/  
 88 (patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or inpatient\$ or in-patient\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$ or mother\$ or father\$ or sibling\$ or sister\$ or brother\$).ti.  
 89 or/85-88  
 90 pamphlets/  
 91 needs assessment/  
 92 information centers/  
 93 information services/  
 94 health education/  
 95 information dissemination/  
 96 counseling/  
 97 social support/  
 98 self-help groups/  
 99 self care/  
 100 ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj6 (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.  
 101 ((patient\$ or parent\$ or famil\$ or relative\$ or carer\$ or caregiver\$ or care-giver\$ or spous\$ or husband\$ or wife\$ or wive\$ or partner\$) adj6 (counsel\$ or selfhelp\$ or self-help\$ or self help\$ or selfcar\$ or self-car\$ or self car\$)).ti.  
 102 patient education as topic/  
 103 patient education handout/  
 104 consumer health information/  
 105 patient\* diar\*.tw.  
 106 or/90-105  
 107 89 and 106  
 108 72 or 84 or 107  
 109 animals/ not humans/  
 110 108 not 109

## 151 **D.5 Health economics search strategy**

### 152 **D.5.1 Economic evaluations and quality of life data**

#### 153 **Sources searched to identify economic evaluations**

- 154 • NHS Economic Evaluation Database – NHS EED (Wiley)
- 155 • Health Technology Assessment Database – HTA (Wiley)
- 156 • Embase (Ovid)
- 157 • MEDLINE (Ovid)
- 158 • MEDLINE In-Process (Ovid)

- 159 • Search filters to retrieve economic evaluations and quality of life papers were appended to  
 160 cataracts population search terms to identify relevant evidence in July 2015. The re-run  
 161 search took place in December 2016.

162 **Table 24: Cataracts health economics search**

<b>Medline Strategy, searched 17<sup>th</sup> July 2015</b>	
<b>Database: Ovid MEDLINE(R) 1946 to July Week 2 2015</b>	
<b>Search Strategy:</b>	
1	exp Cataract/ (24456)
2	exp Cataract Extraction/ (29877)
3	cataract*.tw. (42416)
4	(pha?oemulsif* or phaco or phako).tw. (6366)
5	((lens* or capsul*) adj4 (opaci* or cloud*)).tw. (4413)
6	(lensectom* or capsulorrhexis or capsulorrhexis).tw. (2012)
7	Lenses, Intraocular/ (13023)
8	Lens Implantation, Intraocular/ (8890)
9	(lens* adj4 (extract* or aspirat* or operat* or remov* or surg* or excis* or implant* or emulsif* or intraocul*)).tw. (17838)
10	IOL*.tw. (7513)
11	Pseudophakia/ (1722)
12	pseudophaki*.tw. (2958)
13	Aphakia, Postcataract/ (1804)
14	aphaki*.tw. (4173)
15	or/1-14 (69976)
16	Economics/ (26821)
17	exp "Costs and Cost Analysis"/ (191630)
18	Economics, Dental/ (1879)
19	exp Economics, Hospital/ (20606)
20	exp Economics, Medical/ (13901)
21	Economics, Nursing/ (3930)
22	Economics, Pharmaceutical/ (2596)
23	Budgets/ (10120)
24	exp Models, Economic/ (10960)
25	Markov Chains/ (10669)
26	Monte Carlo Method/ (21496)
27	Decision Trees/ (9248)
28	econom\$.tw. (165942)
29	cba.tw. (8917)
30	cea.tw. (16896)
31	cua.tw. (815)
32	markov\$.tw. (12516)
33	(monte adj carlo).tw. (22197)
34	(decision adj3 (tree\$ or analys\$)).tw. (8949)
35	(cost or costs or costing\$ or costly or costed).tw. (326036)
36	(price\$ or pricing\$).tw. (24417)
37	budget\$.tw. (18103)
38	expenditure\$.tw. (36926)
39	(value adj3 (money or monetary)).tw. (1416)
40	(pharmacoeconomic\$ or (pharmaco adj economic\$)).tw. (2930)
41	or/16-40 (690826)
42	"Quality of Life"/ (128885)

**Medline Strategy, searched 17<sup>th</sup> July 2015****Database: Ovid MEDLINE(R) 1946 to July Week 2 2015****Search Strategy:**

- 43 quality of life.tw. (149495)
- 44 "Value of Life"/ (5495)
- 45 Quality-Adjusted Life Years/ (7808)
- 46 quality adjusted life.tw. (6579)
- 47 (qaly\$ or qald\$ or qale\$ or qtime\$).tw. (5382)
- 48 disability adjusted life.tw. (1361)
- 49 daly\$.tw. (1322)
- 50 Health Status Indicators/ (20843)
- 51 (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. (16326)
- 52 (sf6 or sf 6 or short form 6 or shortform 6 or sf six or sfsix or shortform six or short form six).tw. (1042)
- 53 (sf12 or sf 12 or short form 12 or shortform 12 or sf twelve or sftwelve or shortform twelve or short form twelve).tw. (2919)
- 54 (sf16 or sf 16 or short form 16 or shortform 16 or sf sixteen or sfsixteen or shortform sixteen or short form sixteen).tw. (21)
- 55 (sf20 or sf 20 or short form 20 or shortform 20 or sf twenty or sftwenty or shortform twenty or short form twenty).tw. (339)
- 56 (euroqol or euro qol or eq5d or eq 5d).tw. (4343)
- 57 (qol or hql or hqol or hrqol).tw. (26846)
- 58 (hye or hyes).tw. (54)
- 59 health\$ year\$ equivalent\$.tw. (38)
- 60 utilit\$.tw. (119657)
- 61 (hui or hui1 or hui2 or hui3).tw. (904)
- 62 disutili\$.tw. (235)
- 63 rosser.tw. (71)
- 64 quality of wellbeing.tw. (5)
- 65 quality of well-being.tw. (341)
- 66 qwb.tw. (175)
- 67 willingness to pay.tw. (2439)
- 68 standard gamble\$.tw. (686)
- 69 time trade off.tw. (788)
- 70 time tradeoff.tw. (217)
- 71 tto.tw. (631)
- 72 or/42-71 (341572)
- 73 41 or 72 (985875)
- 74 15 and 73 (2282)
- 75 Animals/ not Humans/ (3986044)
- 76 74 not 75 (2223)
- 77 limit 76 to english language (1982)