Appendix C: Review Protocols

	Details
Review question	What information do people with cataracts and their carers find useful, and what format (for example written or verbal) do they prefer it to be provided in?
Objectives	To determine the information needs of people at diagnosis of cataracts and their carers, in order to inform the content, utility and applicability of literature (verbal or written) on cataracts.
Type of review	Qualitative
Language	English
Study design	Interviews, surveys, mixed-methods designs
Status	Articles published from 2000 onwards
Population	Adults (18 years and over) diagnosed with non-trauma related cataracts or their carers
Intervention	Education, information booklet/leaflets, videos
Comparator	Not relevant
Outcomes	Themes surrounding patients' or carers' educational or informational needs for example, information on prognosis, self-management, treatment options
Other criteria for inclusion/exclusion of studies	• Include studies that used qualitative methods for data collection (including focus group and individual interviews, observation, and document analysis) and qualitative methods for data analysis (including thematic analysis or any other appropriate qualitative analysis method that enabled analysis of text and observations and narrative presentation of findings). • Exclude non-qualitative research and studies for example, narrative reviews, commentaries, editorials/letters, opinion pieces, case studies/reports. • Exclude studies that collected data using qualitative methods but analysed/presented the data using only quantitative methods.
Review strategies (data extraction, quality assessment, data analysis)	The quality of included papers will be assessed using appropriate study design specific checklists. Data will be analysed qualitatively (thematic synthesis methods) and overall confidence in the evidence for each outcome will be assessed using the CERQual tool.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What information on cataract surgery do people and their carers find useful when deciding whether surgery is appropriate for them, and before, during and after any operation(s) they elect to undergo? What format (for example written or verbal) do they prefer it to be provided in?
Objectives	To determine the information needs of people considering or about to undergo cataract surgery and their carers, in order to inform the content, utility and applicability of literature (verbal or written) on cataract surgery.
Type of review	Qualitative
Language	English
Study design	Interviews, surveys, mixed-methods designs
Status	Articles published from 2000 onwards
Population	Adults (18 years and over) with experience of non-trauma related cataract surgery or their carers
Intervention	Education, information booklet/leaflets, videos
Comparator	Not relevant
Outcomes	Themes surrounding patients' or carers' educational or informational needs for example, information on prognosis, self-management following surgery, risks of complications
Other criteria for inclusion/exclusion of studies	• Include studies that used qualitative methods for data collection (including focus group and individual interviews, observation, and document analysis) and qualitative methods for data analysis (including thematic analysis or any other appropriate qualitative analysis method that enabled analysis of text and observations and narrative presentation of findings) • Exclude non-qualitative research and studies for example, narrative reviews, commentaries, editorials/letters, opinion pieces, case studies/reports. • Exclude studies that collected data using qualitative methods but analysed/presented the data using only quantitative methods. • Exclude: non-OECD countries
Review strategies (data extraction, quality assessment, data analysis)	The quality of included papers will be assessed using appropriate study design specific checklists. Data will be analysed qualitatively (thematic synthesis methods) and overall confidence in the evidence for each outcome will be assessed using the CERQual tool.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What are the indicators for referral for cataract surgery?
Objectives	To identify indicators for referral for cataract surgery by optometrists/general practitioners
Type of review	Prognostic
Language	English
Study design	Studies of prioritisation criteria/appropriateness frameworks/scores including validation studies, surveys
Status	Articles published from 2000 onwards The guideline committee agreed that the search date should start from 2000 which coincides with the publication of 'Action on Cataracts' that provided guidance on the referral criteria for cataract surgery in the UK. This impacted upon waiting times and patients' expectations.
Population	Studies that included indicators for referral for phacoemulsification cataract surgery in adults (18 years and older) with non-trauma related cataracts
Intervention	Prioritisation criteria/appropriateness frameworks/scores/referral policies
Comparator	Not relevant
Outcomes	• Indicators for referral for cataract surgery • Conversion rate i.e. proportion of people referred and went on to have cataract surgery • Patient reported outcome measures (PROMs) • Health-related quality of life • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: narrative reviews, commentaries, editorials/letters, opinion pieces, case studies/reports • Exclude: non-OECD countries
Review strategies (data extraction, quality assessment, data analysis)	The quality of included papers will be assessed using appropriate study design specific checklists. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What are the optimal clinical thresholds in terms of severity and impairment for referral for cataract surgery?
Objectives	To identify clinical thresholds for referrals for phacoemulsification cataract surgery
Type of review	Prognostic
Language	English
Study design	Epidemiological prognostic studies investigating the effects of varying levels of indicators on outcomes for phacoemulsification cataract surgery
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery for non-trauma related cataracts
Intervention	Prioritised prognostic factors: • Preoperative visual function • Preoperative visual acuity • Preoperative health-related quality of life
Comparator	Not relevant
Outcomes	• Falls • Road traffic accidents • Health-related quality of life (including surrogate markers) • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: narrative reviews, commentaries, editorials/letters, opinion pieces, case studies/reports • Exclude: non-OECD countries
Review strategies (data extraction, quality assessment, data analysis)	The quality of included papers will be assessed using appropriate study design specific checklists. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of different techniques for undertaking biometry?
Objectives	To compare the effectiveness of: • ultrasound biometry (immersion and contact) and optical biometry to measure axial length • keratometry (manual and automated) and topography to measure corneal curvature
Type of review	Intervention
Language	English
Study design	Randomised controlled trials (RCTs)
Status	No date restrictions
Population	Adults (18 years and over) undergoing biometry prior to phacoemulsification cataract surgery with intraocular lens (IOL) implantation
Interventions	Ultrasound biometry (axial length) • Immersion ultrasound. Examples: immersion A-scan, ultrasound A-scan, A-scan ultrasonography (Canon KU-1 IOL measurer), immersion B-guided • Contact/applanation ultrasound (contact A-mode). Examples: Grieshaber Biometric System, VPLUS A/B scanner Keratometry (corneal curvature) • Manual • Automated Examples: IOL Master, autokeratometer/Topcon KR- 7100, partial coherence interferometry keratometer, videokeratography
Comparators	Optical biometry (axial length) • Examples: partial coherence laser interferometry (optical or ocular) coherence biometry, laser Doppler interferometry, IOL Master (Carl Zeiss), LENSTAR LS 900, optical low-coherence reflectometry (OLCR) optical biometer, laser interference biometry Topography (corneal curvature) • Examples: Pentacam Scheimpflug, Orbscan Topography System
Outcomes	• Deviation from predicted refractive outcome expressed as a spherical equivalent • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: narrative reviews, case studies/reports/series, reliability studies, diagnostic accuracy studies, non-comparative studies. Studies on healthy eyes/people, animals, other ocular conditions besides cataracts • Exclude: combination surgical procedures i.e. cataract surgery in tandem with other surgical procedures e.g. phacotrabeculectomy, canaloplasty, Descemet's stripping automated endothelial keratoplasty, keratorefractive • Exclude: studies comparing biometry techniques and no biometry only, standard care that is not specified or clinical prediction
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	People with high myopia (different axial lengths)
Baseline characteristics to be extracted in evidence tables	Axial length

	Details
Review question	What are the most appropriate formulae to optimise intraocular lens biometry calculation?
Objectives	To determine the most appropriate formulae to optimise intraocular lens biometry calculation in adults undergoing phacoemulsification cataract surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials (RCTs)
Status	No date restrictions
Population	Adults (18 years and over) undergoing biometry prior to phacoemulsification cataract surgery with intraocular lens implantation
Interventions	Formulae used in intraocular lens biometry calculations • Examples: Hoffer Q, Sanders/Retzlaff/Kraff (SRK/T), Holladay II, Olsen, Colebrander, Haigis
Comparators	All formulae vs. each other
Outcomes	• Deviation from predicted refractive outcome expressed as a spherical equivalent • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: SRK I, SRK II, Binkhorst II, Holladay I as these are no longer clinically relevant
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• People with prior history of corneal refractive surgery e.g. LASIK, LASEK, radial keratotomy or photorefractive keratectomy • Axial length (linked to specific formulae) • Piggy back lenses i.e. 2 intraocular lenses inserted instead of 1
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of strategies used to select intraocular lens constants in order to optimise biometry calculation?
Objectives	To determine the effectiveness of different strategies used to select intraocular lens constants in order to optimise biometry calculation.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials (RCTs)
Status	No date restrictions
Population	Adults (18 years and over) undergoing biometry prior to phacoemulsification cataract surgery with intraocular lens implantation
Interventions	Optimisation methods of IOL constants • Examples: surgeon-specific lens constants, axial length-specific lens constants, keratometry-specific lens constants
Comparators	Different optimisation methods vs. each other
Outcomes	• Deviation from predicted refractive outcome expressed as a spherical equivalent • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	Axial length measurement i.e. different biometry techniques

	Details
Review question	What other factors should be considered such as, who should undertake biometry and when should preoperative biometry be assessed?
Objectives	To identify other factors that should be considered to minimise the risk of biometry and postoperative refractive errors.
Type of review	Intervention
Language	English
Study design	Any
Status	No date restrictions
Population	Adults (18 years and over) undergoing biometry prior to phacoemulsification cataract surgery with intraocular lens implantation
Intervention	• Who should undertake biometry • When should preoperative biometry be assessed • Second eye prediction refinement
Comparator	Not relevant
Outcomes	• Deviation from predicted refractive outcome expressed as a spherical equivalent • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: letters, editorials, commentaries, case reports • Exclude: combination surgical procedures i.e. cataract surgery in tandem with other surgical procedures e.g. trabeculectomy, canaloplasty, Descemet's stripping automated endothelial keratoplasty, keratorefractive; studies that do not specify the type of cataract surgery
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE and/or CERQual as appropriate.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What are the procedural causes of wrong lens implant errors?
Objectives	To determine the procedural causes of wrong lens implant errors
Type of review	Qualitative
Language	English
Study design	Any
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Wrong lens implant errors
Comparator	Not relevant
Outcomes	• Procedural causes of wrong lens implant errors • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included studies will be assessed using relevant risk of bias tools. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE and/or CERQual as appropriate.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What strategies should be adopted to reduce the risk of wrong lens implant errors?
Objectives	To identify strategies to minimise the risk of wrong lens implant errors
Type of review	Qualitative
Language	English
Study design	Any
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Strategies to minimise risk of wrong lens implant errors e.g. surgical checklists
Comparator	Not relevant
Outcomes	• Wrong lens implant error rates • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included studies will be assessed using relevant risk of bias tools. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE and/or CERQual as appropriate.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of risk stratification techniques to reduce surgical complications?
Objectives	To determine the effectiveness of preoperative risk stratification techniques in reducing surgical complications and errors
Type of review	Intervention
Language	English
Study design	• Prognostic validation studies • Randomised controlled trials (RCTs) • Observational studies
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Preoperative risk stratification systems
Comparator	No preoperative risk stratification system
Outcomes	• Surgical complications rates e.g. dropped nucleus/posteriorly dislocated crystalline lenses, pseudophakic bullous keratopathy/endothelial cell loss, posterior capsule rupture/vitreous loss/prolapse, retinal detachment, endophthalmitis, posterior and anterior capsular tears, conversion to manual extracapsular cataract extraction, postoperative refractive astigmatism, suprachoroidal haemorrhage, chronic macular oedema • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: studies that examine the risk of cataracts following other ocular surgical procedures e.g. trabeculectomy; risk factors for developing cataracts; risk of complications from procedures/types of device, studies on procedural safety surgical checklists e.g. WHO, case reports/case studies
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included studies will be assessed using relevant risk of bias tools. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE and/or CERQual as appropriate.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What are the risk factors associated with increased surgical complications in cataract surgery?
Objectives	To determine the risk factors that are associated with an increase in surgical complications and errors
Type of review	Prognostic
Language	English
Study design	• Prognostic studies • Observational studies
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Not relevant
Comparator	Not relevant
Outcomes	Surgical complications rates e.g. dropped nucleus/posteriorly dislocated crystalline lenses, pseudophakic bullous keratopathy/endothelial cell loss, posterior capsule rupture/vitreous loss/prolapse, retinal detachment, endophthalmitis, posterior and anterior capsular tears, conversion to manual extracapsular cataract extraction, postoperative refractive astigmatism, suprachoroidal haemorrhage, chronic macular oedema Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: studies that examine the risk of cataracts following other ocular surgical procedures e.g. trabeculectomy; risk factors for developing cataracts; risk of complications from procedures/types of device, studies on procedural safety surgical checklists e.g. WHO, case reports/case studies
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included studies will be assessed using relevant risk of bias tools. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE and/or CERQual as appropriate.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of laser-assisted phacoemulsification cataract surgery compared with standard ultrasound phacoemulsification cataract surgery?
Objectives	To compare the effectiveness of laser-assisted phacoemulsification cataract surgery with standard ultrasound phacoemulsification cataract surgery.
Type of review	Intervention
Language	Any
Study design	Randomised controlled trials (RCTs); randomisation of individuals or eyes. Single eye studies and studies which include both eyes.
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery and posterior chamber intraocular lens (IOL) implantation
Intervention	Laser-assisted phacoemulsification cataract surgery (e.g. Catalys, LENSAR, LenSx, Victus)
Comparator	Standard ultrasound phacoemulsification cataract surgery
Outcomes	• Visual acuity (aided and unaided; best corrected visual acuity [BCVA]): report mean at longest follow-up timepoint • Intraoperative complications • Resource use and costs (e.g. total duration of procedure, number of operating rooms/practitioners) • Postoperative complications • Refractive outcome (deviations e.g. deviation from the predictive refractive outcome) • Refractive outcome (predictions) • Patient satisfaction
Other criteria for inclusion/exclusion of studies	None
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Type of intraocular lenses e.g. standard monofocal lenses • Surgical technique: grid fragmentation pattern specific cataract surgery
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the optimal type and administration of anaesthesia for cataract surgery?
Objectives	To determine the optimal type and administration of anaesthesia for phacoemulsification cataract surgery
Type of review	Intervention
Language	English
Study design	Randomised controlled trials (RCTs)
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery for non-trauma related cataracts and intraocular lens (IOL) implantation
Intervention	Methods: • peribulbar/periocular block • retrobulbar block • sub-Tenon's anaesthesia • topical (drops) ± intracameral (diluted with saline) Drugs: • Lidocaine/xylocaine • Bupivacaine
Comparator	• Different methods vs. each other • Different drugs vs. each other • Warming of drug vs. no warming of drug
Outcomes	• Intraoperative pain • Pain on administration of anaesthesia • Surgical complication rates • Anaesthetic-related complications • Patient satisfaction • Resource use and costs
Other criteria for inclusion/exclusion of studies	• Exclude: studies on general ophthalmic conditions • Exclude: letters, editorials, commentaries, narrative reviews, observational studies, case reports • Exclude: combination surgical procedures i.e. cataract surgery in tandem with other surgical procedures e.g. trabeculectomy, canaloplasty, Descemet's stripping automated endothelial keratoplasty, keratorefractive; studies that do not specify the type of cataract surgery • Exclude: 2-chloroprocaine, articaine (not licensed for ophthalmic use in UK) • Exclude: studies on concomitant intravenous sedation/preoperative anxiolytic regimens as this may mask pain perception and will also be covered in separate sedation review question e.g. benzodiazepines (bromazepam, alprazolam, diazepam), sedatives (propofol or remifentanil) • Exclude: studies on new viscoelastic substances as this will be covered in the hyaluronidase review question (e.g. sodium hyaluronate 1.5% and lidocaine 1%)
Review strategies	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Axial lengths • People on anticoagulants
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of sedation as an adjunct to local anaesthesia during cataract surgery?
Objectives	To determine the effectiveness of sedation as an adjunct to local anaesthesia during phacoemulsification cataract surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials (RCTs)
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery for non-trauma related cataracts and intraocular lens (IOL) implantation
Intervention	Sedation (midazolam, fentanyl, propofol)
Comparator	No sedation
Outcomes	• Intraoperative pain • Pain on administration of anaesthesia • Surgical complication rates • Anaesthetic-related complications • Patient satisfaction • Resource use and costs
Other criteria for inclusion/exclusion of studies	• Exclude: studies on general ophthalmic conditions • Exclude: letters, editorials, commentaries, narrative reviews, observational studies, case reports • Exclude: combination surgical procedures i.e. cataract surgery in tandem with other surgical procedures e.g. trabeculectomy, canaloplasty, Descemet's stripping automated endothelial keratoplasty, keratorefractive; studies that do not specify the type of cataract surgery • Exclude: studies on different types of sedation only
Review strategies	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Method of anaesthetic administration
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of hyaluronidase as an adjunct to local anaesthesia during cataract surgery?
Objectives	To determine the effectiveness of hyaluronidase as an adjunct to local anaesthesia during phacoemulsification cataract surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials (RCTs)
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery for non-trauma related cataracts and intraocular lens (IOL) implantation
Intervention	Hyaluronidase/hyalase/hyaluronic acid
Comparator	No hyaluronidase/hyalase/hyaluronic acid
Outcomes	- Intraoperative pain - Surgical complication rates - Anaesthetic-related complications - Patient satisfaction - Adverse effects of treatment e.g. allergies - Volume of anaesthetic - Resource use and costs
Other criteria for inclusion/exclusion of studies	- Exclude: studies on general ophthalmic conditions - Exclude: letters, editorials, commentaries, narrative reviews, observational studies, case reports - Exclude: combination surgical procedures i.e. cataract surgery in tandem with other surgical procedures e.g. trabeculectomy, canaloplasty, Descemet's stripping automated endothelial keratoplasty, keratorefractive; studies that do not specify the type of cataract surgery
Review strategies	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	In what circumstances should general anaesthesia be considered in phacoemulsification cataract surgery?
Objectives	To determine in what circumstances general anaesthesia should be considered in phacoemulsification cataract surgery.
Type of review	Intervention
Language	English
Study design	Any
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery for non-trauma related cataracts and intraocular lens (IOL) implantation
Intervention	General anaesthesia
Comparator	Not relevant
Outcomes	Indications for general anaesthesia in phacoemulsification cataract surgery
Other criteria for inclusion/exclusion of studies	• Exclude: studies on general ophthalmic conditions • Exclude: letters, editorials, commentaries • Exclude: combination surgical procedures i.e. cataract surgery in tandem with other surgical procedures e.g. trabeculectomy, canaloplasty, Descemet's stripping automated endothelial keratoplasty, keratorefractive; studies that do not specify the type of cataract surgery
Review strategies	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included studies will be assessed using relevant risk of bias tools. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE and/or CERQual as appropriate.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	Are different lens design (aspheric vs. spheric, plate vs. loop) effective in improving postoperative vision (refractive outcomes, optical aberrations) in cataract surgery?
Objectives	To determine the effectiveness of different lens design (aspheric vs. spheric, plate vs. loop) in improving postoperative vision (refractive outcomes, optical aberrations) in cataract surgery.
Type of review	Intervention
Language	English
Study design	• Randomised controlled trials • If none available then comparative cohort
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Different monofocal lenses: • Aspheric vs. spheric • Plate vs. loop vs. 3 piece
Comparator	As listed in the interventions
Outcomes	• Visual acuity • Visual function • Patient reported dysphotopsia (count data) • Night vision problems • Contrast sensitivity • Depth of focus • Near vision • Lens centration • Quality of life • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	Are different lens design (square-edged vs. round-edge, plate vs. loop) and material (hydrophilic acrylic, hydrophobic acrylic, collagen, hydroxyethyl methacrylate-based vs. silicone-based) effective in preventing posterior capsule opacification in cataract surgery?
Objectives	To determine the effectiveness of different lens design (square-edged vs. round-edge, plate vs. loop) and material (hydrophilic acrylic, hydrophobic acrylic, collagen, hydroxyethyl methacrylate-based vs. silicone-based) effective in preventing posterior capsule opacification in cataract surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials then comparative cohort
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Different monofocal lenses: • Square-edge vs. round-edge • Plate vs. loop • Hydrophilic acrylic, hydrophobic acrylic, collagen, hydroxyethyl methacrylate-based vs. silicone-based
Comparator	As listed in the interventions
Outcomes	• Rates of posterior capsule opacification • Visual acuity • Contrast sensitivity • Quality of life • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	Are tinted lenses effective in preventing the incidence and progression of age-related macular degeneration compared with colourless lenses in cataract surgery?
Objectives	To determine the effectiveness of tinted lenses in preventing the progression of age-related macular degeneration compared with colourless lenses in cataract surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials then comparative observational
Status	Articles published from 1995 onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Different monofocal/multifocal lenses: • Tinted vs. colourless • Different colours
Comparator	As listed in the interventions
Outcomes	• Incidence of age-related macular degeneration • Rates of progression of age-related macular degeneration • Visual acuity • Colour vision • Sleep problems • Depression • Quality of life • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Diagnosed AMD (cataract or non-cataract eye)
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	Wat is the optimal strategy to facilitate simultaneous distance and near vision following cataract surgery?
Objectives	To compare the effectiveness of the following strategies to facilitate simultaneous distance and near vision in cataract surgery: • multifocal intraocular lenses • standard monofocal intraocular lenses with different focal points in each eye • standard monofocal intraocular lenses with the same focal point in both eyes plus glasses/contact lenses (optical correction)
Type of review	Intervention
Language	Any
Study design	Randomised controlled trials (RCTs); unilateral and bilateral implantation
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK
Population	Adults (18 years and older) undergoing phacoemulsification cataract surgery and intraocular lens (IOL) implantation in one or both eyes
Interventions	• Any type of non-accommodative multifocal intraocular lenses (including toric multifocal lenses) Examples: AcrySof IQ ReSTOR SN6AD3, ReSTOR SN6AD1, ReSTOR SN60D3, ReZoom NXG1, Gradiol (concept-gradient refractive index optics), Mplus X, MS 714 PB Diff, Sulcoflex 653F, TECNIS ZM900, ZMA00 • Implantation of 1 or 2 monofocal intraocular lenses with the aim of optimising near vision in 1 eye and distance vision in the other • Standard monofocal intraocular lenses with the same focal point in both eyes plus glasses/contact lenses (optical correction) Examples: Akreos AO, ZA9003
Comparators	• All 3 listed interventions vs. each other • Different types of multifocal lenses vs. each other
Outcomes	• Unaided near, intermediate and distance visual acuity • Contrast sensitivity • Complications: glare and other optical aberrations • Visual function/Quality of life • Best corrected visual acuity (BCVA): near, intermediate and distance • Patient satisfaction • Resource use and costs
Other criteria for inclusion/exclusion of studies	• Exclude: studies examining accommodating multifocal lenses only
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be pooled in pairwise and/or network meta-analyses. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Lens technology (bifocal, trifocal, multifocal, refractive, diffractive)
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the optimal strategy to address pre-existing regular astigmatism in people undergoing cataract surgery?
Objectives	To determine the optimal strategy to address pre-existing astigmatism in people undergoing cataract surgery.
Type of review	Intervention
Language	English
Study design	• Randomised controlled trials • If none available then comparative cohort
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation with pre-existing astigmatism
Intervention	• Corneal (limbal) relaxing incisions • On-axis surgery (incision is made on steepest axis to flatten it) • Astigmatic keratotomy • Opposite clear corneal incisions (OCCI) • Toric intraocular lens
Comparator	• Standard monofocal/multifocal lenses with no correction • Each other
Outcomes	• Visual acuity • Level of astigmatism • Patient satisfaction • Quality of life • Resource use and cost (including time taken)
Other criteria for inclusion/exclusion of studies	• OECD only
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Surgeon experience • Astigmatic corrections pre-operatively
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of interventions (for example, prophylactic laser surgery) to prevent retinal detachment in people with myopia undergoing cataract surgery?
Objectives	To determine the effectiveness of interventions (for example, prophylactic laser surgery) to prevent retinal detachment in people with myopia undergoing cataract surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials
Status	No date restrictions
Population	Adults (18 years and over) with myopia undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	• Prophylactic interventions prior to cataract surgery (not at the time of surgery) • Retinal LASER surgery • Cryotherapy
Comparator	No specific intervention
Outcomes	• Rates of retinal detachment • Time to event data • Health-related quality of life • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: non-OECD countries
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Myopia ranges: 3 dioptres, >3 dioptres • Age
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of bilateral simultaneous (rapid sequential) cataract surgery compared with unilateral eye surgery?
Objectives	To determine the effectiveness of bilateral simultaneous (rapid sequential) cataract surgery compared with unilateral eye surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Bilateral simultaneous (rapid sequential) cataract surgery
Comparator	Unilateral eye cataract surgery
Outcomes	• Visual acuity • Visual function • Complication rates (including refractive surprise) • Health-related quality of life • Patient satisfaction • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: non-OECD countries
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	Medical comorbidities
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the appropriate timing of second eye surgery, taking into account issues such as refractive power after first eye surgery?
Objectives	To determine the appropriate timing of second eye surgery, taking into account issues such as refractive power after first eye surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation in the second eye
Intervention	Different timing of second eye surgery
Comparator	Different timings vs. each other No second eye surgery
Outcomes	• Visual acuity • Visual function • Complication rates (including refractive surprise) • Falls • Health-related quality of life • Patient satisfaction • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: non-OECD countries
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of capsular tension rings applied during phacoemulsification cataract surgery?
Objectives	To determine the effectiveness of capsular tension rings applied during phacoemulsification cataract surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Capsular tension rings
Comparator	No capsular tension rings
Outcomes	• Post-operative complications (decentration) • Visual acuity • Post-operative refraction • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Pseudoexfoliation • Multifocal lenses • Toric lenses
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of interventions to increase pupil size to improve visual outcomes and reduce complications during phacoemulsification cataract surgery?
Objectives	To determine the effectiveness of interventions to increase pupil size to improve visual outcomes and reduce complications during phacoemulsification cataract surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials then observational
Status	Articles published from 1990 onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	• Interventions to increase pupil size • Intracameral mydriatics (with or without anaesthesia) – please provide list of mydriatics (tropicamide, phenylephrine) • Viscomydriasis with a high-viscosity ophthalmic viscosurgical device (OVD) e.g. sodium hyaluronate • Manual separation: synechiolysis and/or pupillary membranectomy with spatula and forceps • Mechanical pupillary stretching using iris hooks • Sphincter cutting • Use of mechanical pupil dilation/expansion devices e.g. Graether pupil expander (Eagle Vision); Siepser Iris Protector ring; Perfect Pupil device (Milvella); Morcher Pupil Dilator (Morcher GmbH); Oasis Iris Expander (Oasis Medical, Inc.); Malyugin Ring (MicroSurgical Technology)
Comparator	• No additional procedure • Each other
Outcomes	• Complications (capsular rupture, haemorrhage) • Post-operative complications (inflammation, distorted pupils) • Visual acuity • Visual function • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• People with floppy iris syndrome
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of postoperative eye shields to prevent complications after cataract extraction?
Objectives	To determine the effectiveness of postoperative eye shields to prevent complications after cataract extraction.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	• Postoperative eye shields • Length of time with eye shield
Comparator	• No postoperative eye shields • Different lengths of time
Outcomes	• Accidental trauma • Patient satisfaction • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of prophylactic antiseptics (for example, topical iodine) and antibiotics to prevent endophthalmitis after cataract surgery?
Objectives	To evaluate the effectiveness of the following interventions to prevent endophthalmitis after cataract surgery: • Prophylactic antiseptics (for example, topical iodine) • Prophylactic antibiotics
Type of review	Intervention
Language	Any
Study design	Randomised controlled trials (RCTs)
Status	No date restrictions
Population	Adults (18 years and over) undergoing any cataract surgery
Interventions	• 1) Antiseptics (povidone iodine, chlorhexidine, tisept, presept) vs. no antiseptics • 2a) Preoperative antibiotics (in theatre, several days before surgery) vs. no preoperative antibiotics • 2b) Timing of intraoperative antibiotics (i.e. administered up to the end of the operation e.g. with infusion in the middle of operation, at end of procedure) • 2c) Route of administration of intraoperative antibiotics (topical, parenteral, intravitreous, intracameral, subconjunctival, infusion during surgery) with or without postoperative antibiotics vs. no intraoperative antibiotics or different routes vs. each other • 2d) Postoperative (early e.g. few days and longer term e.g. ≥1 week) topical and systemic antibiotics vs. no postoperative antibiotics • 2e) Different types of postoperative antibiotics vs. each other • 2f) Duration and frequency of postoperative antibiotics • 2g) Timing of antibiotics i.e. preoperative vs. intraoperative vs. postoperative vs. combinations of timing of administration
Comparators	As above
Outcomes	• Endophthalmitis rates: verified/confirmed/culture positive (preferred), suspected, any • Adverse effects of treatment • Best corrected distance visual acuity • Resource use and costs
Other criteria for inclusion/exclusion of studies	• Exclude: non-OECD (Organisation for Economic Co-operation and Development) countries as pathogens and care are likely to be different
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• People on warfarin • People with an increased risk of infection (inflammatory blepharitis, tear duct obstruction) • People who are immunocompromised
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of prophylactic topical corticosteroids and/or NSAIDs to prevent inflammation and cystoid macular oedema after phacoemulsification cataract surgery?
Objectives	To evaluate the effectiveness of prophylactic topical corticosteroids and/or non-steroidal anti-inflammatory drugs (NSAIDs) to prevent inflammation and cystoid macular oedema following phacoemulsification cataract surgery
Type of review	Intervention
Language	Any
Study design	Randomised controlled trials (RCTs); single and both eyes
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	• Corticosteroid drops vs. no treatment • NSAID drops vs. no treatment • Combination of corticosteroid and NSAID drops vs. no treatment • Combination of intraoperative/postoperative corticosteroid injection and postoperative drops vs. no treatment (steroid vs NSAID vs no treatment) • Corticosteroid drops vs. NSAID drops • Timing of postoperative treatment (e.g. 2 vs 4 vs 6 weeks) • Different dosing (frequency and duration) of postoperative treatment
Comparator	As above
Outcomes	• Inflammation rates • Cystoid macular oedema (clinically symptomatic, optical coherence tomography-verified) • Best corrected distance visual acuity • Adverse effects of treatment e.g. raised intraocular pressure (steroid-induced glaucoma), allergies (such as sensitivity to preservatives) • Resource use and costs
Other criteria for inclusion/exclusion of studies	• Include: incident pseudophakic cystoid macular oedema • Exclude: non-OECD (Organisation for Economic Co-operation and Development) countries as pathogens and care are likely to be different
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Higher risk populations e.g. diabetic macular oedema • Complicated vs. uncomplicated phacoemulsification cataract surgery
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of interventions to reduce the impact of peroperative posterior capsule rupture?
Objectives	To determine the effectiveness of interventions to reduce the impact of perioperative posterior capsule rupture.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation who experience a peroperative posterior capsule rupture
Intervention	• Anterior vitrectomy + Triamcinolone • Timing and type of lens insertion • Early versus late lens removal when lens fallen into back of eye
Comparator	• Anterior vitrectomy • Different timings and types • Other timing
Outcomes	• Visual acuity • Visual function • Complications (inflammation and pressure) • Quality of life • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the effectiveness of interventions used to manage cystoid macular oedema following cataract surgery?
Objectives	To determine the effectiveness of interventions used to manage cystoid macular oedema following cataract surgery.
Type of review	Intervention
Language	English
Study design	Randomised controlled trials
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	• NSAIDs • SAIDs • Diamox • Periocular and intraocular steroids • Intraocular Anti-VEGF • Vitrectomy
Comparator	• No intervention • Each other
Outcomes	• Visual acuity • Further surgery (for non-vitrectomy interventions) • Macular thickness • Time to resolution • Adverse events • Quality of life • Resource use and cost
Other criteria for inclusion/exclusion of studies	None specified
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included RCTs will be assessed using the Cochrane's risk of bias tool. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE.
Subgroup analyses (treatment effect modifiers)	• Retinal/vascular disease • Diabetic macular oedema
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What are the early and late complications of cataract surgery?
Objectives	To determine the early and late complications of phacoemulsification cataract surgery.
Type of review	Epidemiological
Language	English
Study design	• Randomised controlled trials • Observational studies
Status	No date restrictions
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Not relevant
Comparator	Not relevant
Outcomes	• All complications • Loss of visual acuity • Loss of visual function • Health-related quality of life • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Exclude: non-OECD countries
Review strategies (data extraction, quality assessment, data analysis)	Citation appraisal against specified criteria to identify relevant studies. Data extracted and included studies will be assessed using relevant risk of bias tools. Where appropriate, data will be meta-analysed. The overall quality of the evidence for each outcome will be assessed using GRADE and/or CERQual as appropriate.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What should the postoperative assessment include?
Objectives	To determine the content of the postoperative assessment following phacoemulsification cataract surgery.
Type of review	Qualitative
Language	English
Study design	Interviews, surveys, mixed-methods designs
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Not relevant
Comparator	Not relevant
Outcomes	• Content in postoperative assessment • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Include studies that used qualitative methods for data collection (including focus group and individual interviews, observation, and document analysis) and qualitative methods for data analysis (including thematic analysis or any other appropriate qualitative analysis method that enabled analysis of text and observations and narrative presentation of findings) • Exclude non-qualitative research and studies for example, narrative reviews, commentaries, editorials/letters, opinion pieces, case studies/reports. • Exclude studies that collected data using qualitative methods but analysed/presented the data using only quantitative methods.
Review strategies (data extraction, quality assessment, data analysis)	The quality of included papers will be assessed using appropriate study design specific checklists. Data will be analysed qualitatively (thematic synthesis methods) and overall confidence in the evidence for each outcome will be assessed using the CERQual tool.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	Who and in what setting should carry out the postoperative assessment?
Objectives	To determine who and in what setting should carry out the postoperative assessment.
Type of review	Qualitative
Language	English
Study design	Interviews, surveys, mixed-methods designs
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Not relevant
Comparator	Not relevant
Outcomes	• Investigations performed • Further interventions - re referral rates • Additional medications prescribed • Delays in diagnosis and treatment • Resource use and costs
Other criteria for inclusion/exclusion of studies	• Include studies that used qualitative methods for data collection (including focus group and individual interviews, observation, and document analysis) and qualitative methods for data analysis (including thematic analysis or any other appropriate qualitative analysis method that enabled analysis of text and observations and narrative presentation of findings) • Exclude non-qualitative research and studies for example, narrative reviews, commentaries, editorials/letters, opinion pieces, case studies/reports. • Exclude studies that collected data using qualitative methods but analysed/presented the data using only quantitative methods.
Review strategies (data extraction, quality assessment, data analysis)	The quality of included papers will be assessed using appropriate study design specific checklists. Data will be analysed qualitatively (thematic synthesis methods) and overall confidence in the evidence for each outcome will be assessed using the CERQual tool.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What issues should be considered when organising postoperative care?
Objectives	To determine what issues should be considered when organising postoperative care.
Type of review	Qualitative
Language	English
Study design	Interviews, surveys, mixed-methods designs
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK onwards
Population	• Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation • People at high risk of non-adherence to standard postoperative care
Intervention	Not relevant
Comparator	Not relevant
Outcomes	• Planned preoperatively at pre assessment • Resource use and cost
Other criteria for inclusion/exclusion of studies	• Include studies that used qualitative methods for data collection (including focus group and individual interviews, observation, and document analysis) and qualitative methods for data analysis (including thematic analysis or any other appropriate qualitative analysis method that enabled analysis of text and observations and narrative presentation of findings) • Exclude non-qualitative research and studies for example, narrative reviews, commentaries, editorials/letters, opinion pieces, case studies/reports. • Exclude studies that collected data using qualitative methods but analysed/presented the data using only quantitative methods.
Review strategies (data extraction, quality assessment, data analysis)	The quality of included papers will be assessed using appropriate study design specific checklists. Data will be analysed qualitatively (thematic synthesis methods) and overall confidence in the evidence for each outcome will be assessed using the CERQual tool.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	What is the appropriate time to assess outcomes in the postoperative period?
Objectives	To determine the appropriate time to assess outcomes in the postoperative period.
Type of review	Qualitative
Language	English
Study design	Interviews, surveys, mixed-methods designs
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Not relevant
Comparator	Not relevant
Outcomes	• Resource use and cost • Stable visual outcome
Other criteria for inclusion/exclusion of studies	• Include studies that used qualitative methods for data collection (including focus group and individual interviews, observation, and document analysis) and qualitative methods for data analysis (including thematic analysis or any other appropriate qualitative analysis method that enabled analysis of text and observations and narrative presentation of findings) • Exclude non-qualitative research and studies for example, narrative reviews, commentaries, editorials/letters, opinion pieces, case studies/reports. • Exclude studies that collected data using qualitative methods but analysed/presented the data using only quantitative methods.
Review strategies (data extraction, quality assessment, data analysis)	The quality of included papers will be assessed using appropriate study design specific checklists. Data will be analysed qualitatively (thematic synthesis methods) and overall confidence in the evidence for each outcome will be assessed using the CERQual tool.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified

	Details
Review question	If the postoperative assessment and care are undertaken outside of the hospital, how should outcomes between surgical units and these providers be effectively communicated?
Objectives	To determine how outcomes between surgical units and postoperative care providers should be effectively communicated, if the postoperative assessment and care are undertaken outside of the hospital.
Type of review	Qualitative
Language	English
Study design	Interviews, surveys, mixed-methods designs
Status	Articles published from 1990 onwards 1990 chosen as a date to correspond with the widespread adoption of phacoemulsification in the UK onwards
Population	Adults (18 years and over) undergoing phacoemulsification cataract surgery with intraocular lens implantation
Intervention	Not relevant
Comparator	Not relevant
Outcomes	Not relevant
Other criteria for inclusion/exclusion of studies	• Include studies that used qualitative methods for data collection (including focus group and individual interviews, observation, and document analysis) and qualitative methods for data analysis (including thematic analysis or any other appropriate qualitative analysis method that enabled analysis of text and observations and narrative presentation of findings) • Exclude non-qualitative research and studies for example, narrative reviews, commentaries, editorials/letters, opinion pieces, case studies/reports. • Exclude studies that collected data using qualitative methods but analysed/presented the data using only quantitative methods.
Review strategies (data extraction, quality assessment, data analysis)	The quality of included papers will be assessed using appropriate study design specific checklists. Data will be analysed qualitatively (thematic synthesis methods) and overall confidence in the evidence for each outcome will be assessed using the CERQual tool.
Subgroup analyses (treatment effect modifiers)	None specified
Baseline characteristics to be extracted in evidence tables	None specified