Coding Guidelines for CATARACT SURGERY

Choose CATARACT SURGERY on the registry form. There are 5 options for reporting cataract surgery. The first option, “Cataract surgery”, includes two follow up visits and both are mandatory to report. The second option, “Cataract day one follow up” includes only one follow up registration on the day after surgery. The third option, “Cataract intraOP only” has no follow up reporting. The fourth option, “Cataract longterm postop only” includes one follow up reporting 7 to 60 days after surgery. Then there is a possibility to report ECOS data (for those participating in the European Cataract Outcome Study) as option number 5.

When you join EUREQUO you have to decide with your Registry Manager which option for follow up data you should use. Then all your surgeries should be reported according to this decision. A minimum level for reporting follow up data is during one month. You can decide with your Registry Manager to report follow up data during the whole year or less, but one month is the minimum period. If you choose one month, the month of March is preferred by the registry in order to collect data in a comparable way.

1. Patient
All fields marked with an asterisk * are mandatory

Patient no. *
Each patient is identified by a number. The participating unit decides this number. It is possible to use the same number twice so you can report surgery on both eyes under the same patient number. The unit must keep this number in a list if validation of data will take place in the future.

Year of birth *
Give the year that your patient was born. Only patients 18 years or older should be reported.

Gender *
Mark the gender of the patient.

Ethnic group
If you fill in this variable and the ethnic group is unknown, just leave the variable without any chosen category.
- Caucasian
- Black
- Asian
- Hispanic
- Pacific Islander
- Native American
- Mixed ethnicity
- other

**Eye**
Choose the eye to be operated on OD (right eye) or OS (left eye). If you are going to operate on both eyes, mark the first eye (OD or OS) and make the registration. After save and finalize this eye there will appear an icon for “register other eye” on the “form view” page. When you click on this button a new form will appear with all person information given and the other eye marked (OS or OD).

**ASA classification**
Choose
- ASA I
- ASA II
- ASA III
- ASA IV
- ASA V

The ASA physical status classification system is a system for assessing the fitness of patients before surgery.
1. A normal healthy patient.
2. A patient with mild systemic disease.
3. A patient with severe systemic disease.
4. A patient with severe systemic disease that is a constant threat to life.
5. A moribund patient who is not expected to survive without operation

**2. Preoperative**
All fields marked with an asterisk * are mandatory

**Previous cataract surgery**
If the fellow eye has had a cataract extraction previously, tick Yes. If not, No.

**Eye to be operated on**

**Best corrected distance VA (CDVA)**
Choose the distance visual acuity of the eye to be operated on with best correction.

**Refraction**
Give the spherical refraction with correct sign. The spherical refraction is divided up in quarter of dioptres. Cylinder refraction if not 0 should always be given as a minus refraction. The cylinder refraction is divided up in quarter of dioptres. Give the cylinder axis.

**Biometry target refraction ( )**
Give the predicted refraction according to the biometry calculation (on the display or print out) and the chosen IOL. The target refraction is divided up in 0.05 dioptres. Choose the value closest to your biometry prediction.
This variable is optional **only** when you don’t report patients for follow up. For all follow up reporting options this variable is mandatory.

**Co-existing eye disease * **
Choose
- none
- glaucoma
- macular degeneration
- diabetic retinopathy
- amblyopia
- other

Fill in one or more relevant alternatives. The listed diseases should be ticked if there is a diagnosis established, you don’t have to decide if the disease actually influences visual acuity. “Other” means other eye diseases with a potential threat to visual acuity.

**Complicating co-morbidity * **
Choose
- none
- previous corneal refractive surgery
- white cataract (use of trypan blue)
- pseudoexfoliation
- previous vitrectomy
- corneal opacities
- small pupil (need for mechanical dilatation)
- other

Fill in one or more relevant alternatives. The variable relates to changes in the eye that increases the surgical difficulty.

“Previous corneal refractive surgery” and “previous vitrectomy” are categories beyond dispute.

“White cataract” should be ticked when a dense cataract has made use of trypan blue necessary.

“Pseudoexfoliation” also includes findings made after pupil dilatation.

“Corneal opacities” should be ticked when central corneal opacities disturb the visibility of cataract and capsule.

“Small pupil” should only be ticked when a mechanical dilatation (stretching) has been performed.

“Other” includes difficulties like use of hooks in the rhexis border, use of capsule tension ring and similar activities.

**Preoperative K-values: K1**
Preoperative K-values, K1 and K2 are given in diopters of the steepest and flattest meridian given in degrees. If you use an automated keratometer the values are given with two decimals. If you use a manual keratometer the first decimals are usually approximated and the second one will then be zero. These are the same values used for calculating the power of the lens. If your unit is not reporting K-values just ignore these boxes.

**Preoperative K-values: K2**
Same as above.
**Fellow eye** (not mandatory)

**Best Corrected distance VA (CDVA)**
Choose the distance visual acuity of the fellow eye with best correction.

**Refraction**
Give the spherical refraction with correct sign. The spherical refraction is divided up in quarter of dioptres. Cylinder refraction if not 0 should always be given as a minus refraction. The cylinder refraction is divided up in quarter of dioptres. Give the cylinder axis.

**3. Intraoperative**
All fields marked with an asterisk * are mandatory

**Date of surgery***
Choose Year (Y) – Month (M) – Day (D)

**Type of anaesthesia**
Use only one alternative:
- general
- topical
- subtenon
- local-peribulbar
- local-retrobulbar
- topical+intra-cameral
- other
“Topical” means only drops, “topical + intra-cameral” means drops combined with intra-cameral injection of an anaesthetic drug.

**Type of operation***
Use only one response option. Phaco means a procedure completed as phaco. Unplanned ECCE means phaco converted to ECCE during the surgery. All surgeries with ACL should be reported as phaco/ECCE + ACL.
- phaco PCL
- planned ECCE+PCL
- unplanned ECCE+PCL
- phaco/ECCE+ACL
- phaco+filtering surgery+PCL
- other

**Type of IOL material***
Choose only one out of seven categories;
- acrylic hydrophobic
- acrylic hydrophilic
- hydrogel
- PMMA
- silicon
- no IOL
- other
Combined material as acrygel should be noted as other. The type of material refers to the surface of the optics. This means that if there is one material on the surface and another inside the optics, it is the surface material that counts.

**Specific IOL quality**
If relevant choose one or both categories of specific IOL quality.
- none
- aspheric IOL
- yellow IOL

**Additional refractive quality**
Choose only one out of four categories;
- multifocal
- accommodative
- toric
- multifocal toric

Depending on what premium IOL that has been marked various combinations of additional refractive information will be visible to fill in. The power is expressed as half steps of Dioptres. In case of a toric or multifocal toric IOL the intended alignment axis can also be reported.
- Spherical power D
- Addition power D
- Cylinder power D
- Intended alignment axis

**Complications during surgery***
Choose one or more categories:
- none
- posterior capsular rupture
- vitreous loss
- dropped nucleus
- iris damage
- other

Note that “vitreous loss” and “dropped nucleus” in most cases should be combined with “posterior capsule rupture”. So every type of listed complication should be filled in, not only the most serious one!
“Vitreous loss” signifies a vitreous prolaps in the wound and some sort of mechanical cleaning (by automated vitrectomy or manual by scissors and sponge).
“Other” means an unexpected occurrence during surgery that may influence the visual outcome (examples: increased IOP with flat anterior chamber, significant bleeding from iris or wound into the anterior chamber/vitreous, problems because of poor patient co-operation).

**Inpatient surgery**
“Yes” means staying at least one night at the hospital/clinic after surgery.
4. Postoperative 1-6 days
Postoperative 1-6 days is mandatory during the period when short term follow-up registry or complete follow-up registry has been chosen.

Date of examination*
Give the Year (Y) – Month (M) – Day (D) when the follow-up examination was performed.

Uncorrected VA operated eye *
(=using target refraction if myopic)
Uncorrected distance VA here means VA with target refraction. This means that if the target refraction was –2.5 you test VA with –2.5 and report that VA.

Postoperative complications*
This variable is supposed to measure how traumatic the surgery has been. Therefore only short-term complications are included.
Choose one or more categories:
- none
- central corneal oedema/striae
- elevated IOP (>30 mmHG)
- explantation
- other
“Central corneal oedema/striae” means oedema/striae over the pupil area of the cornea, not peripheral in association with the incision only.
“Elevated IOP” means before eventual medication is given.
“Explantation” means explantation of IOL.
“Other” could be iris prolaps in the wound, significant haemorrhage in the anterior chamber, dislocated IOL etc.

5. Postoperative 7-60 days
This part of follow-up data is mandatory during the time period when registrations have been decided as long term follow-up registration or complete follow-up registration.
A unit can decide and agree with the Registry Manager to participate in follow-up registrations for 1 month per year as a minimum. If the follow-up registration only occurs during 1 month, it should be the month of March. This means that all surgeries performed during the month of March should be reported with follow-up data. The reason for a specific month for all is to make comparison possible.
A unit can sign up for follow-up registrations during more than 1 month, even a whole year. However, the rule is that every cataract extraction during the agreed period should be reported with follow-up. Thus, not only self-selected cases but all cases must be reported.
All fields marked with an asterisk * are mandatory for follow-up registration.

Date of examination*
Give the Year (Y) – Month (M) – Day (D) when the follow-up examination was performed.

Uncorrected distance VA operated eye (UDVA) *
Uncorrected visual acuity means without any correction in this follow-up notation.

**Best corrected distance VA operated eye (CDVA)** *
Give the best distance VA with correction.

**Additional refractive quality:**
*These variables are only for cataract extractions with implantation of a premium IOL. Various visual acuity notations should be filled in (mandatory) depending on the type of premium IOL that has been used.*

**Best corrected distance binocular VA (Binocular CDVA)** *
Give the best corrected binocular VA. The surgery eye should have best correction and the fellow eye its ordinary correction.

**Uncorrected intermediate VA operated eye (UIVA)** *
Intermediate test distance means 50-60 cm in this registry.

**Binocular intermediate uncorrected VA (Binocular UIVA)** *
Intermediate test distance means 50-60 cm in this registry.

**Uncorrected near VA operated eye (UNVA)** *
Near test distance means 30-40 cm in this registry.

**Best corrected near VA operated eye (CNVA)** *
Near test distance means 30-40 cm in this registry.

**Binocular best corrected near VA (Binocular CNVA)** *
Near test distance means 30-40 cm in this registry.

**Refraction** *
This is a mandatory variable and means refraction of the surgery eye at distance. Give the spherical refraction with correct sign. The spherical refraction is divided up in quarter of dioptres. Cylinder refraction if not 0 should always be given as a minus refraction. The cylinder refraction is divided up in quarter of dioptres. Give the cylinder axis.

Alignment axis is an optional variable and should be filled in if a toric or multifocal toric IOL has been implanted and the intended alignment axis was reported.

**K1-values operated eye + K2-values operated eye**
Preoperative K-values, K1 and K2 are given in diopters of the steepest and flattest meridian given in degrees. If you use an automated keratometer the values are given with two decimals. If you use a manual keratometer the first decimals are usually approximated and the second one will then be zero. These are the same values used for calculating the power of the lens. If your unit is not reporting K-values just ignore these boxes. Not mandatory.

**Macular degeneration known before or revealed after cataract removal** *
Tick Yes or No.
This variable is meant to capture also cases with a macular degeneration that was invisible before surgery because of a dense cataract.

**Postoperative complications***

Choose one or more categories:
- none
- persistent central corneal oedema/striae
- reduced vision due to opacities in the posterior capsule
- uveitis with need for medication
- endophthalmitis
- uncontrolled elevated IOP
- explantation
- other

“Persistent central corneal oedema/striae” means oedema/striae covering the pupil area.

“Reduced vision due to opacities in the posterior capsule” means reduced visual acuity because of opacities that are visible in the microscope and disturbing the visibility of the retina.

“Uveitis with need for medication” means an inflammation that makes any kind of medical treatment necessary at follow-up.

“Endophthalmitis” means clinical signs of suspected endophthalmitis.

“Uncontrolled elevated IOP” means elevated IOP (> 30mmHg) with a need for chronically treatment.

“Explantation” means explantation of IOL.

“Other” means other complications that may influence the visual outcome of surgery.

**Additional surgery**

This variable is meant for surgical corrections after use of premium IOLs in order to achieve perfect vision (usually uncorrected) at the desired distance.

Choose one
- limbal relaxing incision (LRI)
- corneal laser surgery