

Instructions for completing cataract surgery records (CSR)

The Cataract Surgery Record (CSR) has to be completed for each eye operated for cataract (if all patients are included in the monitoring of visual outcome) or for patients randomly selected for follow-up. If the same patient is operated at a later date for cataract in the second eye, a new form should be completed for the second operation. Each operated eye should be treated as a separate event.

On lines, text (name of patient, address, etc) should be written. In the square boxes, a number has to be entered. Circles can be made black or tick marked. For each parameter, only one circle can be marked. All fields need an entry, except those marked 'optional'. Write clearly and make it a habit to check all data you have written on the form before you send it for data entry. Be aware that the data entry operator, who has not seen the patient and in most cases is not an eye surgeon, should not make any errors in transferring your findings into the computer. When an entry on the CSR cannot be entered into the database because of an error message, the data operator should return the form to the eye surgeon and request the CSR to be reviewed.

Please note that the following patients might be excluded from monitoring because the expected visual outcome after cataract surgery could be less than optimal:

- persons, operated for cataract and younger than 20 years
- persons with traumatic cataract
- persons having combined procedures (e.g. cataract surgery with corneal graft, or cataract surgery with trabeculectomy, etc.)

A. Patient

Name

Write the surname first, followed by the first name and other name(s). The name can have a maximum of 23 characters. Names will not appear in analysis but are used to identify records to enter follow up data.

Address

Write the address to identify and locate the patient. The address can have a maximum of 40 characters. This field is not used for analysis. If you do not intend to follow-up patients, you may skip this field.

Registration No.

Enter the hospital registration number of the patient here. This may help to retrieve medical records of patients.

Serial No.

This number will be generated by the computer and is used to select a random sample for follow-up studies. The data entry operator has to write the number that appears on the computer screen on the corresponding CSR. This Serial number is unique and cannot appear twice.

Sex

Mark 'Male' or 'Female'.

Age (in years)

For age 20 to 98, write the age in years. For age of 99 years and over, write "99". Do not make a record when the operated patient is younger than 20 years. The computer only allows entry of ages of 20 to 99 years.

B. Pre-operative examination

Presenting VA (right and left eye)

Measure the visual acuity of each eye separately, with the available correction, if any (=presenting vision). Use the categories listed in the box on the right (category of visual acuity) and write the acuity next to VA on the appropriate line. You can use the Snellen 6/60, Snellen 20/200, the decimal or the LogMar system. If you want to change the visual acuity measurement system for data entry, close the 'Patients' screen first, then click Utilities | Settings and select the VA system of your choice.

Best corrected VA (right and left eye)

Measure the visual acuity with the best possible correction. If refraction cannot be done, vision with pinhole can substitute for best correction. Use the categories listed in the box on the right (category of visual acuity) and write the acuity next to VA on the appropriate line. You can use the Snellen 6/60, Snellen 20/200, the decimal or the LogMar system. The 'best' VA cannot be worse than the presenting vision. If this is the case you cannot continue until the correct entries are made.

Lens examination (right and left eye)

The lens of both eyes should be examined. For each eye, only one option may be marked. At least one eye should have operable cataract; otherwise, there is no indication for cataract surgery. 'Cannot examine' should only be marked in those cases where the lens cannot be seen, as in phthisis bulbi, dense corneal scarring, etc.

Type of other eye disease in operated eye?

Mark one of the other concurrent eye diseases in the operated eye, likely to affect the outcome. Mark 'corneal scar', 'old iritis', 'retinal disease', 'glaucoma' or 'other' and specify the condition. If there are no concurrent eye diseases, mark 'None'.

Optional:

The fields under this heading are optional and can be left empty. Entries should only be made for the eye to be operated.

Eye to be operated

Mark the eye that is to be operated upon.

Pre-op refraction

Sp (spherical): allowed: -15 to +15

Cyl (cylindrical): allowed: 0 to -10

Axis: allowed: 0 to 180

Biometry

K1 (highest curvature): allowed: 35 to 50

K2 (lowest curvature): allowed: 35 to 50

Axial length: allowed: 20 to 27

Targeted post-op spherical equivalent

Formula: Spherical equivalent = spherical correction + cylindrical correction/2

Allowed values are: -10 to +5

Enter the target post-operative refraction in spherical equivalents (SE) for this operation. For example, if you aim at -1, enter "-1". If emmetropia is your goal, enter "0". Should you aim at, for instance, S= -3 and Cyl= -1, enter "-3.5" (SE= -3+(-1 / 2)). The programme will calculate the difference in spherical equivalents between the estimated and actual refraction obtained after the operation.

C. Surgery

Date of operation

Write the date of cataract surgery in the format you as dd-mm-yyyy (default). If you want the mm-dd-yyyy format, select this option at Utilities | Settings. You can enter "02" for the year 2002.

Place

Mark the place where the surgery was performed.

Eye operated

Mark which eye was operated upon.

Type of surgery

Mark the surgical technique used. "SICS" stands for Small Incision Cataract Surgery (SICS) or Blumenthal method.

IOL

Mark which type of IOL was used. ICCE cannot be combined with PC-IOL.

Hospital/camp ID

If you intend to analyse outcome by hospital(s) or camp(s), you should create a code for each hospital, clinic or camp in File | Other files | Hospitals/Camps. Make sure all participating staff knows these codes and uses them correctly. This will make it possible to analyse visual outcome of cataract operations for each of the coded centres or for all centres together. Even if all records are from one centre only, a number and a name have to be entered in the Hospitals/Camps file.

Surgeon ID

If you wish to analyse outcome by surgeon, you should create a list of codes for each surgeon in File | Other files | Surgeons. Make sure all eye surgeons know these codes and use them correctly. It is possible to analyse visual outcome of cataract operations for each coded surgeon or for all surgeons together. Even if all records are by one eye surgeon only, a number and a name have to be entered in the Surgeons file.

Training

Mark the level of training of the surgeon. The term 'Cataract surgeon' is reserved for non-doctors, specially trained and qualified to perform cataract surgery.

Peri-Operative complications in operated eye

Mark if there were any operative complications in the operated eye. Only one complication may be marked. In case of more than one complication, the principal complication most (likely) responsible for the reduction in post-op vision, should be marked. In case the complication is not listed, mark "Other" and specify the condition.

Optional:

The fields under this heading are optional and can be left empty. Entries should only be made for the eye that was operated upon.

Section

Mark the place and type of the section.

Capsulotomy

Mark the type of capsulotomy.

Type IOL

Create a list of the most commonly used IOL's and enter the codes and names of these IOL's in File | Other files | IOL Types. Make sure all eye surgeons know these codes and use them correctly.

IOL power

Enter the power of the IOL implanted. Allowed values are between +8 and +30 Dioptres.

Suturing

Mark the type of suturing used.

No. of sutures

Only when interrupted suturing is the number of sutures (1-9) can be entered. When "No suture" is entered under Suturing, you should enter "0" here. In case of "Continuous", "1" should be entered here.

D. Visual acuity of operated eye post-operatively

The visual acuity of the operated eye only can be assessed at several periods after the operation. First assessment should be done at discharge. If the patients was operated and discharged the same day, and will be seen again after one or two days, then record the discharge findings can be taken on the first or second post-operative day.

No days between operation and discharge

Write the number of days after the actual operation when the discharge assessment is made. You can enter 1 to 7 days. If the patient is discharged more than 7 days after the operation, then enter the findings on the 7th day and enter these in this row. When patients are operated and return home the same day, to be reviewed on the first or second day post-operatively, enter "1" or "2" respectively and measure the VA on this day. This field cannot be left empty.

Discharge - presenting VA

Write the visual acuity of the operated eye with available correction, if any, on the line next to VA. Use the categories listed in the box on the right (category of visual acuity) and write the code that goes with the acuity next to VA on the appropriate line. You can use the 6/60, 20/200, the decimal system or the LogMar system. This field cannot be left empty.

Discharge - Best corrected VA

Write the visual acuity of the operated eye only with best correction. If refraction cannot be done, pinhole vision can be used. Use the VA categories as given. This field cannot be left empty and 'Best corrected VA' cannot be worse than presenting vision.

Discharge - cause of presenting VA <6/60

If presenting VA at discharge is less than 6/60, mark one of the three causes of poor outcome. If the presenting VA at discharge is 6/60 or better, this field should not be marked.

1-3 weeks postop. (first follow-up visit) - date

The first follow-up visit should take place 1-3 weeks post-operatively. Write the date in dd/mm/yyyy or mm-dd-yyyy format. Only entries between 1-3 weeks after the date of operation are allowed in this field.

1-3 weeks post-op - Presenting VA

Enter the visual acuity of the operated eye only, with available glasses, if any, at this first follow-up visit, 1-3 weeks post-op. Use the VA categories as given.

1-3 weeks post-op - Best corrected VA

Enter the visual acuity of the operated eye only, with best correction or with pinhole. Use the VA categories as given. Best corrected VA cannot be worse than presenting VA.

1-3 weeks post-op - cause of presenting VA <6/60

If presenting VA at first follow-up visit is worse than 6/60, one of the four causes of poor outcome must be marked. Post-operative sequelae, like retinal detachment, PCO, etc. can be marked here. Only one cause can be marked. If there is more than one cause for poor outcome select the cause that contributes most to the poor outcome. If the presenting VA at discharge is 6/60 or better, do not mark any of the boxes under 'cause'.

4-11 weeks post-op (second follow-up visit) - date

The second follow-up visit should take place 4-11 weeks post-operatively. Write the date in dd/mm/yyyy or mm-dd-yyyy format. Only entries between 4-11 weeks after the date of operation are allowed in this field.

4-11 weeks post-op - presenting VA

Enter the visual acuity of the operated eye only, with available glasses, if any, at second follow-up visit, 4-11 weeks post-op. Use the VA categories as given.

4-11 weeks post-op - Best corrected VA

Enter the visual acuity of the operated eye only, with best correction or with pinhole. Use the VA categories as given. Best corrected VA cannot be worse than presenting VA.

4-11 weeks post-op - cause of presenting VA <6/60

If presenting VA at second follow-up visit is <6/60, one of the four causes of poor outcome must be marked. If there is more than one cause for poor outcome select the cause that contributes most to the poor outcome. If the presenting VA at discharge is 6/60 or better, do not mark any of the boxes under 'cause'.

12+ weeks postop. (third follow-up visit) - date

The third follow-up visit should take place 12 weeks or more post-operatively. Write the date in dd/mm/yyyy or mm-dd-yyyy format. Only entries of 12 weeks or more after the date of operation are allowed in this field.

12+ weeks postop. - presenting VA

Enter the visual acuity of the operated eye only, with available glasses, if any, at third follow-up visit, 12 or more weeks post-op. Use the VA categories as given.

12+ weeks postop. - Best corrected VA

Write the visual acuity of the operated eye only with best correction or with pinhole. Use the VA categories as given. Best corrected VA cannot be worse than the presenting VA.

12+ weeks postop. - cause of presenting VA <6/60

If presenting VA at third follow-up visit is <6/60, one of the four causes of poor outcome must be marked. If there is more than one cause for poor outcome select the cause that contributes most to the poor outcome. If the presenting VA at discharge is 6/60 or better, do not mark any of the boxes under 'cause'.

Optional:

The fields under this heading are optional and can be left empty. Entries should only be made for the eye that was operated upon.

4-11 weeks post-op. refraction

Sp (spherical): allowed: -15 to +15

Cyl (cylindrical): allowed: 0 to -10

Axis: allowed: 0 to 180

DSE: calculated value: Difference in Spherical Equivalent between targeted SE and actual SE

12+ weeks post-op. refraction

Sp (spherical): allowed: -15 to +15

Cyl (cylindrical): allowed: 0 to -10

Axis: allowed: 0 to 180