

Guidelines for Training of Eye Surgeons under National Programme for Control of Blindness (NPCB) during the 12th Five Year Plan

National Programme for Control of Blindness (NPCB) was launched in the year 1976 as a 100% centrally sponsored scheme with the goal of reducing the prevalence of blindness to 0.3% by 2020. Rapid Survey on Avoidable Blindness conducted under NPCB during 2006-07 showed reduction in the prevalence of blindness from 1.1% (2001-02) to 1% (2006-07). Training of Eye Surgeons and other ophthalmic manpower has remained a priority area under the programme to ensure delivery of quality eye-care services to the needy population of the country.

The main objectives of NPCB

- To reduce the backlog of avoidable blindness through identification and treatment of curable blind at primary, secondary and tertiary levels, based on assessment of the overall burden of visual impairment in the country.
- Develop and strengthen the strategy of NPCB for “Eye Health for All” and prevention of visual impairment; through provision of comprehensive universal eye-care services and quality service delivery.
- Strengthening and upgradation of Regional Institutes of Ophthalmology (RIOs) to become centre of excellence in various sub-specialties of ophthalmology and also other partners like Medical College, District Hospitals, Sub-district Hospitals, Vision Centres, NGO Eye Hospital.
- Strengthening the existing infrastructure facilities and developing additional human resources for providing high quality comprehensive Eye Care in all Districts of the country;
- To enhance community awareness on eye care and lay stress on preventive measures;
- Increase and expand research for prevention of blindness and visual impairment
- To secure participation of Voluntary Organizations/Private Practitioners in delivering eye Care.

It has been planned to train 2500 Eye Surgeons from Government hospitals in the following sub-specialties of Ophthalmology through the identified training institutions located in different regions of the country during the 12th Five Year Plan period under NPCB:

1. ECCE/IOL Implantation
2. SICS
3. Phaco Emulsification
4. Low Vision Services
5. Glaucoma Diagnosis and Surgical Management
6. Pediatric Ophthalmology
7. Medical Retina and Laser Techniques
8. Vitreoretinal Surgery

9. Eye Banking and Keratoplasty hands-on training
10. Oculoplasty
11. Strabismus - diagnosis management both medical and surgical

Training Programme:

(1): General- short term (2 months)

- i) ECCE/IOL implantation
- ii) SICS (Small Incision Cataract Surgery)
- iii) Phaco Emulsification

(2): Subspecialty- short term (2 months)

- i) Glaucoma Diagnosis & Surgical Management
- ii) Eye Banking & Keratoplasty Hands-on training
- iii) Oculoplasty
- iv) Strabismus Diagnosis Management & both Medical and Surgical
- v) Pediatric Ophthalmology

(3): Subspecialty- short duration (one week)

Low Vision Services

(4): Subspecialty - Short term (3 Months)

- i) Medical Retina & Laser Techniques - ROP-stage I+II
- ii) Vitreo Retinal Surgery - ROP-stage III+IV

The training Programme will include theoretical, investigative procedures as well as practical knowledge/hands-on training in the field of Ophthalmology. Ample opportunity should be provided to handle Ophthalmic Medical and operative cases under the close guidance of the faculty of concerned specialty, so that confidence is developed by the trainee to handle surgical cases independently after the training is over. Therefore, at least one or more surgeries are to be performed by trainees in each surgical day of the trainer, under the close supervision of their trainers to make them able to deliver eye care services to the needy patients. At the end of the training, trainees should know all the investigative procedures and should be able to do independent surgeries in their set up. A daily log book will be maintained with supervisor's signature which will be submitted to

the SPO (NPCB) concerned at the end of the training. A training completion performa must be filled up by each trainee and sent to DDG (NPCB), Nirman Bhawan, New Delhi.

General guidelines to be followed by the Training Centres while imparting training to Eye Surgeons:

- 1. General training in ECCE/IOL, SICS and Phaco Emulsification:** Each surgeon is to be taught procedures like Keratometry, Biometry and Yag Laser Capsulotomy along with surgery techniques. It should be ensured by the training centre that at least 25 surgeries are performed by each trainee under the direct and overall supervision of the trainer specialist.
- 2. Medical Retina & Laser Technique and Vitreo-retinal Surgery:** Special attention should be given by the trainer on each trainee to teach use of Indirect Ophthalmoscope, fluorescein angiography, + 78 D Lenses and +90 D Lenses etc. This includes PRP laser delivery in 20 cases, ROP cases etc. On the initial stages of laser delivery training, appropriate paper material may be used by the trainee and subsequently, laser may be done on the live patient under supervision of the trainer.

Candidates receiving training in these fields will also be attached with the ROP clinic in the last (3rd) month of their training wherein they shall practice laser technique in at least 10 ROP cases.

- 3. Pediatric Ophthalmology:** Training in Pediatric Ophthalmology should be with particular emphasis on management of Amblyopia and squint, Cataract, Glaucoma and Retinopathy of pre-maturity (ROP) diagnosis.
- 4. Low Vision Services:** Candidates receiving training in this field will be posted to Low Vision units of the training institution. They should be taught handling of various instruments, L.V Aids and Management of patients.

**List of identified training institutions for training of Eye Surgeons under NPCB:
Eastern Region:**

S. No.	Name and address of Training Centre	Field of training
1	Sri Sankaradeva Netralaya, Guwahati, Assam.	1. ECCE/IOL 2. SICS 3. Pediatric Ophthalmology 4. Medical Retina & Laser Techniques 5. Vitreoretinal Surgery 6. Phaco Emulsification 7. Glaucoma Diagnosis and surgical management 8. Ocuoloplasty

		9. Eye Banking and Keratoplasty Hands-on training 10. Low Vision Services 11. Strabismus Management
2	Regional Institute of Ophthalmology Medical College & Hospital Kolkatta – 700073	1. ECCE/IOL 2. SICS 3. Phaco Emulsification 4. Medical Retina & Laser Techniques
3	L.V Prasad Eye Institute Hyderabad (A.P) and Bhubneshwar, Orissa	1. ECCE/IOL 2. SICS 3. Phaco Emulsification 4. Medical Retina & Laser techniques 5. Vitreo Retinal Surgery
4	JPM Rotary Eye Hospital & Research Institute Cuttack.	1. ECCE/IOL 2. SICS 3. Phaco Emulsification 4. Pediatric Ophthalmology 5. Glaucoma 6. Medical Retina & Laser Techniques

Western Region:

S. No.	Name and address of Training Centre	Field of training
5	Mahatma Gandhi Institute of Medical Sciences, Wardha, Maharashtra	1. ECCE/IOL 2. SICS 3. Oculoplasty
6	PBMS's HV Desai Hospital, Pune, Maharashtra	1. ECCE/IOL 2. SICS 3. Phaco Emulsification 4. Pediatric Ophthalmology 5. Low Vision Services 6. Medical Retina & Laser Techniques 7. Vitreoretinal Surgery 8. Glaucoma 10. Eye Banking and Keratoplasty Hands-on training
7	Aso-Palov Eye Hospital Ahmedabad, Gujarat	1. Low Vision Services 2. Medical Retina & Laser

		Techniques 3. Vitreoretinal Surgery
8	Alakh Narain Mandir, Udaipur, Rajasthan	1. ECCE/IOL 2. SICS 3. Phaco Emulsification 4. Medical Retina & Laser Techniques
9	Drashti Netralaya, Dahod, Gujarat	1. SICS 2. Pediatric Ophthalmology 3. Medical Retina & Laser Techniques 4. Vitreo-retinal Surgery 5. Oculoplasty
10	Mahatme Eye Bank & Eye Hospital, Nagpur, Maharashtra.	1. ECCE/IOL 2. Phaco Emulsification 3. SICS 4. Oculoplasty 5. Eye Banking and Keratoplasty Hands-on training
11	Sahai Institute & Research Centre, Jaipur-302004 Rajasthan	1. ECCE/IOL 2. SICS 3. Phaco Emulsification

Northern Region:

S. No.	Name and address of Training Centre	Field of training
12	Venue Eye Institute, New Delhi.	1. ECCE/IOL 2. SICS 3. Phaco Emulsificatio 4. Medical Retina & Laser Techniques 5. Vitreoretinal Surgery 6. Low Vision Services 7. Eye Banking and Keratoplasty Hands-on training
13	Shroff's Charity Eye Hospital, Delhi.	1. ECCE/IOL 2. Low Vision Services 3. Pediatric ophthalmology 4. Medical Retina & Laser Techniques

		<ul style="list-style-type: none"> 5. SICS 6. Glaucoma 7. Eye Banking and Keratoplasty Hands-on training 8. Strabismus Management
14	R.P. Centre, AIIMS, New Delhi.	<ul style="list-style-type: none"> 1. ECCE/IOL 2. SICS 3. Phaco Emulsification 4. Low Vision Srvices 5. Pediatric Ophthalmology 6. Medical Retina & Laser Techniques 7. Vitreoretinal Surgery 8. Glaucoma 9. Eye Banking and Keratoplasty Hands-on training
15	St. Stephen Hospital, Delhi.	<ul style="list-style-type: none"> 1. ECCE/IOL 2. Phaco Emulsification 3. Low Vision Services 4. Pediatric Ophthalmology 5. Medical Retina & Laser Techniques
16	PGI Chandigarh.	<ul style="list-style-type: none"> 1. SICS 2. Phaco Emulsification 3. Pediatric Ophthalmology 4. Medical Retina & Laser Techniques 5. Vitreoretinal Surgery 6. Glaucoma
17	RIO, Govt MD Eye Hospital, Allahabad.	<ul style="list-style-type: none"> 1. ECCE/IOL 2. SICS 3. Phaco Emulsification 4. Low Vision Srvices 5. Pediatric Ophthalmology 6. Medical Retina & Laser Techniques 7. Vitreoretinal Surgery 8. Glaucoma 9. Eye Banking and Keratoplasty Hands-on training
18	I-Care Hospital, Noida.	<ul style="list-style-type: none"> 1. ECCE/IOL 2. Glaucoma

		3. Medical Retina & Laser Techniques
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Southern Region:

S. No.	Name and address of Training Centre	Field of training
19	Regional Institute of Ophthalmology Chennai.	1. ECCE/IOL 2. SICS 3. Phaco Emulsification 4. Low Vision Services 5. Pediatric Ophthalmology 6. Medical Retina & Laser Techniques 7. Glaucoma 8. Eye Banking and Keratoplasty Hands-on training 9. Oculoplasty
20	Arvind Eye Hospital, Madurai.	1. ECCE/IOL 2. SICS 3. Starbismus Management (Medical & Surgical) 4. Low Vision Services 5. Pediatric Ophthalmology 6. Medical Retina & Laser Techniques 7. Glaucoma 8. Eye Banking and Keratoplasty Hands-on training 9. Oculoplasty
21	Sankara Netralaya, Chennai.	1. Medical Retina & Laser Techniques 2. SICS
22	K.G. Eye Hospiatal, Coimbatore.	1. ECCE/IOL 2. SICS
23	Kanchi Kamakoti MedicalTrust Coimbatore.	1. ECCE/IOL 2. SICS
24	Institute of Ophthalmology, Telc Joseph Hospital, Tiruchirapalli	1. ECCE/IOL 2. SICS

		<ol style="list-style-type: none"> 1. Phaco Emulsification 2. Medical Retina & Laser Techniques 3. Vitreo Retinal Surgery 4. Low Vision Services 5. Medical Retina & Laser Techniques 6. Glaucoma 7. Pediatric Ophthalmology
25	CBM Ophthalmic Institute, Angamalay (Kerala)	<ol style="list-style-type: none"> 1. ECCE/IOL 2. SICS 3. Pediatric Ophthalmology 4. Medical Retina & Laser Techniques 5. Glaucoma 6. Eye Banking and Keratoplasty Hands-on training
26	Giridhar Eye Institute Ponneth Temple Road, Kadavanthra, Kochi- 682020	<ol style="list-style-type: none"> 1. Vitreo Retinal Surgery 2. Medical Retina & Laser Technique
27	Vithala Eye Institute Bangalore, Karnataka	<ol style="list-style-type: none"> 1. Medical Retina & Laser techniques 2. Glaucoma Management
28	Regional Institute of Ophthalmology Thiruvananthapuram, Kerala	<ol style="list-style-type: none"> 1. ECCE/IOL 2. SICS 3. PHACO 4. Vitro-retinal surgery 5. Glaucoma 6. Medical Retina & Laser Technique

Central Region:

S. No.	Name and address of Training Centre	Field of training
29	Sadguru Sewa Sangh Trust, Chitrakoot	1. SICS 2. Phaco Emulsification 3. Pediatric Ophthalmology 4. Glaucoma
30	MGM Eye Institute, Raipur, Chhattisgarh	1. ECCE/IOL 2. SICS 3. PHACO 4. Medical Retina & Laser Technique 5. Low Vision
31	Sarojini Devi Eye Hospital and RIO, Hyderabad.	1. ECCE/IOL 2. SICS 3. Phaco Emulsification 4. Low Vision Services 5. Pediatric Ophthalmology 6. Medical Retina & Laser Techniques 7. Vitreoretinal Surgery 8. Glaucoma 9. Eye Banking and Keratoplasty Hands-on training
32	Sankar Foundation, Vishakhapatnam	1. SICS, 2. Phaco Emulsification 3. Medical Retina & Laser Techniques, 4. Glaucoma

* The list of training institutes as well as the sub-specialties can be amended at any time in future to make it more comprehensive. Training is one of the primary functions of Regional Institutes of Ophthalmology under NPCB. Therefore, the trainees may also be deputed for training at RIOs subject to availability of training slots.

Financial norms for training programmes:

It has been planned to trainee 2500 eye surgeons during the 12th Five Year Plan at a cost of upto Rs.80,000/- per trainee. Keeping in view duration of training and essential training materials, equipments, drugs etc., financial norms for the various training programmes have been prepared as under: The revised norms will be applicable from the new batches starting with effect from 1st January, 2014 till further orders.

Three months training programmes: Medical Retina & Laser Technique and Vitreo-retinal Surgery

(Amount in Rs.)

Support to Training Centre to meet expenses towards: i) Consumables, Instruments, Drugs / Medicines etc. ii) Training material iii) Remuneration to faculty iv) Use of equipments of training Institute v) Organizational charges etc.	Rs. 33,500/-
Travel Cost- AC II Tier / Shatabdi / by Road (Actual estimated average)	Rs. 6,000/-
DA @ 250 for the Trainees X 90 days	Rs 22,500/-
Accommodation rentals @Rs.200 X 90 days	Rs. 18,000/-
Total	Rs. 80,000/-

Two months training programme: Phaco Emulsification

(Amount in Rs.)

Support to Training Centre to meet expenses towards: i) Consumables, Instruments, Drugs / Medicines etc. ii) Training material iii) Remuneration to faculty iv) Use of equipments of training Institute v) Organizational charges etc.	Rs. 35,000/-
Travel Cost- AC II Tier / Shatabdi / by Road (Actual estimated average)	Rs. 6,000/-
DA @ 250 for the Trainees X 60 days	Rs 15,000/-
Accommodation rentals @Rs.200 X 60 days	Rs. 12,000/-
Total	Rs. 68,000/-

Two months training programme:, ECCE/IOL, SICS, Eye Banking and Keratoplasty, Glaucoma, Oculoplasty, Starbismus Management both Medical and Surgical and Pediatric Ophthalmology:

(Amount in Rs.)

Support to Training Centre to meet expenses towards: i) Consumables, Instruments, Drugs / Medicines etc. ii) Training material iii) Remuneration to faculty iv) Use of equipments of training Institute v) Organizational charges etc.	Rs. 25,000/-
Travel Cost- AC IITier / Shatabdi / by Road	Rs. 6,000/-

(Actual estimated average)	
DA @ 250 for the Trainees X 60 days	Rs 15,000/-
Accommodation rentals @Rs.200 X 60 days	Rs. 12,000/-
Total	Rs. 58,000/-

One week training programme: Low Vision

(Amount in Rs.)

Support to Training Centre to meet expenses towards: i) Consumables, Instruments, Drugs / Medicines etc. ii) Training material iii) Remuneration to faculty iv) Use of equipments of training Institute v) Organizational charges etc.	Rs. 2,700/-
Travel Cost- AC IITier / Shatabdi / by road (Actual estimated average)	Rs. 6,000/-
DA @ 250 for the Trainees X7 days	Rs 1,750/-
Accommodation rentals @Rs.200 X 7 days	Rs. 1,400/-
Total	Rs. 11,850/-

Role of central programme Division:

1. Identification/recognition of training institutions.
2. Allotment of training slots to States.
3. Allotment of appropriate training centres to applicants.
4. Release of funds to identified training institutions on submission of utilization certificate and audited accounts for the earlier grant.

Role of Training Centers:

1. Each Training Centre shall follow the general guidelines for imparting training to trainees as mentioned in pre-paras.
2. The training centre shall report the name of each trainee to DDG(O) after he/she reports for training for a particular batch.
3. The Training Centre shall submit a training report of each trainee to DDG(O) in triplicate immediately after completion of training Programme.
4. The Training Centre shall release travel and other dues to the candidate after submission of training report with a copy marked to DDG (O) and SPO concerned.
5. No DA is to be paid to the local participants/trainees as per the norms.
6. Balance funds left with the training centre at the end of the financial year should be intimated alongwith details.
7. At the end of each financial year, the training centre shall submit the following document to DDG(O), Dte.GHS:
List of Eye Surgeons trained during the year alongwith the name of training they have obtained.

8. The Consolidated Utilization Certificate and Statement of Expenditure (SOE) duly audited by the chartered accountant shall be submitted to the Under Secretary NPCB. Further grant shall be released only on receipt of requisite details.
9. All the training centres may, therefore, co-operate for the necessary feed back to DDG (O) for the successful implementation of training programme under National Programme for Control of Blindness.

Role of State Government:

1. Nomination of eye surgeon for training in different specialty of Ophthalmology should invariably carry the Bio-data of the trainee in the prescribed format already circulated for the purpose.
2. It should be ensured by the State Governments that services of eye surgeons trained in different specialties are properly utilized in the Blindness Control Programme and should not be transferred to a hospital where there are no eye care facilities
3. A consolidated report of eye surgeons trained, specialty wise, during the year may be forwarded at the close of each Financial Year.
4. The SPO of the States/UTs are advised to apprise all the trainees nominated for specialized training under NPCB, about the above guidelines and should ensure the filling up of assessment report at the end of training by each one of them. These reports may be maintained by the SPO and a consolidated quarterly summary may be forwarded to DDG(O) at the end of each quarter ending Dec, March, June & September regularly.
5. The selection of candidates should be done keeping in mind the basic skills required for attaining the higher training, e.g., an eye surgeon seeking phaco training should be well versed with SICS. It should also be ensured that sufficient time is available for the trainee surgeon to utilize training attained before he/she retires.
6. It should also be ensured that the service of eye surgeon is utilized for the eye specialty for which he/she has attained training.
