Training programme on Standardizing Primary Eye Care Services (SPECS)
Introduction:

Primary Eye Care Services are the first access at community level. In India we have the need to provide services to a finite population with permanent commitment to the community with appropriate infrastructure and trained human resources drawn from local sources. By improving the eye health seeking behavior in the communities and providing eye care facilities through vision centers at accessible locations, people who require services the most can access them on affordable and equitable basis.

To full fill the need of services, ophthalmic personnel should have clear understanding of primary eye care services. Therefore, the focus of the training programme was on:

- Drawing differences between primary eye care and community eye care
- Proper ophthalmic examination at vision centre
- Discussion on increasing the update of services
- Spectacles prescription
- Ocular emergencies
- Their role at primary eye care services
- Best practice patterns of ophthalmic dispensing at vision center

Keeping above in view, VISION 2020 INDIA organized a refresher training programme on “Standardizing Primary Eye Care Services (SPECS)” on 16 & 17 November 2018 at Dr Shroff’s Charity Eye Hospital, Delhi.

This programme was intended vision technicians, optometrists, ophthalmic assistants who provide eye care services at primary level.

Objective of the workshop:

“To build the capacity of VTs/OAs and primary eye care providers on standardizing the primary eye care services among the member hospitals”
### Agenda:

#### Day-1: 16 November 2018 (Friday)

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<th>DURATION</th>
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<tr>
<td>08:30 – 9:00</td>
<td>Registration</td>
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<td>09:00 – 9:30</td>
<td>Welcome &amp; Keynote Address</td>
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<td>09:30 – 10:00</td>
<td>History taking &amp; Documentation: A guide towards diagnosis</td>
<td>Optom Prem Kumar Singh</td>
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<td>10:00 – 10:30</td>
<td>Retinoscopy techniques: How to be quick &amp; consistent for Refraction out-comes</td>
<td>Optom Sonia Sharma</td>
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<td>10:30 – 10:45</td>
<td>Subjective Refraction: Techniques to improve the quality of prescription</td>
<td>Optom Suresh C Yadav</td>
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<td>10:45 – 11:00</td>
<td>Discussion</td>
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<td>11:00 – 11:15</td>
<td>TEA BREAK</td>
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<td>11:15 – 12:00</td>
<td>Integration of community eye health with primary eye health care</td>
<td>Dr Praveen Vashist</td>
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<td>12:00 – 12:15</td>
<td>Visual acuity assessment in children: How it is different from adults?</td>
<td>Optom Jyotsana</td>
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<td>12:30 – 13:00</td>
<td>Use of technology and analytics in Primary Eye Care – Pellucid’s experience in South Asia</td>
<td>Mr Sunny Mannava</td>
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<td>13:00 – 13:15</td>
<td>Discussion</td>
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<td>13:15 – 14:00</td>
<td>LUNCH</td>
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<td>14:00 – 14:30</td>
<td>Innovations in Cataract management</td>
<td>Mr. Nitin Chaudhary</td>
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<td>14:30 – 15:00</td>
<td>To prescribe Single vision, Bifocal or Multifocal: A need based approach &amp; adaptation tips</td>
<td>Optom Prem Kumar Singh</td>
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<td>15:00 – 15:15</td>
<td>Spectacle Frame selection &amp; fitting assessment: Trouble shooting in dispensing</td>
<td>Optom Suresh C Yadav</td>
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<td>15:15 – 15:30</td>
<td>TEA BREAK</td>
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<td>15:30 – 16:15 (Hands-on session)</td>
<td>Slit-lamp Examination &amp; Applanation tonometry</td>
<td>Group1</td>
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<td>Vision &amp; Refraction techniques in children</td>
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<td>Retinoscopy tips</td>
<td>Group3</td>
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<td>IPD measurement &amp; fitting alignment</td>
<td>Group4</td>
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<tr>
<td>16:15 – 17:00 (Hands-on session)</td>
<td>Slit-lamp Examination &amp; Applanation tonometry</td>
<td>Group4</td>
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<td>Vision &amp; Refraction techniques in children</td>
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<td>IPD measurement &amp; fitting alignment</td>
<td>Group1</td>
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#### Day-2: 17 November 2018 (Saturday)

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<td>09:00 – 09:15</td>
<td>Re-cap from the day 1</td>
<td>Dr Shalinder Sabherwal</td>
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<td>09:15 – 09:30</td>
<td>Ocular injuries reporting to the center: What you as primary eye care professional does?</td>
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November 16 & 17, 2018  

[Training programme on Standardizing Primary Eye Care Services (SPECS)]

**Participation:**
Encouraging participation observed in the training programme. Forty-five delegates from 13 organizations across 5 states participated in the programme. Professionals/personnel involved in primary eye care services, benefitted from the programme.

**Programme:**

**Dr Umang Mathur,** Executive Director, Dr Shroff’s Charity Eye Hospital, welcomed the participants. Stressing on the importance of primary eye care, Dr Umang pointed out that generally a top down approach is adopted with more emphasis on developing a tertiary hospital. But on several occasions if a patient’s problem can be addressed at the primary level, a visit to the tertiary hospital can be avoided thus reducing not only the burden on a tertiary hospital but also a time and cost saving for the patient. This is especially in case of Refractive error. A simple spectacle can change the quality of life and all this can be provided at the primary level. Hence it is vital to train cadre for primary level. In this context, this training programme is important as it aims to upgrade the skills, especially as technology is also improving.

Dr Umang further said that there is a requirement for enhanced workforce. Only 20% of the problem is addressed at the camps but if eye heath work force is stationed permanently for the purpose of providing primary eye care services at primary level, it would be of great means for all including those who are not able to access facilities at camps.

Dr Umang emphasized the importance of a large trained workforce at primary level.

Outlined the importance of the training programme, **Mr Phanindra Babu Nukella,** CEO, VISION 2020 INDIA, said that with newer technology emerging, skill up gradation is
important and requested the participants to take advantage of the two day programme. He urged the participants to implement the learnings at their organizations.

Mr Prem from Dr Shroff’s Charity Eye Hospital began with the opening presentation emphasizing the importance of the role of optometrists. He oriented the participants on why upgrading their skills was important. His presentation focused on how to approach a patient’s examination and recording it. He discussed on importance of history taking and the correct method for documentation which would be a guide towards diagnosis of the problem.

Mr Birendra Pratap Singh, Optometry faculty from Dr Shroff’s Charity Eye Hospital presentation was on “Retinoscopy technique-How to be quick & Consistent for Refraction out-comes”. He discussed some of the challenges one can encounter and the salient points for it. He mentioned about the Diagnostic and therapeutic dilemmas and discussed a key piece of information, Clinicians missing. He informed about use of Retinoscopy and its accommodation system.

Mr Suresh C Yadav, Optometry faculty from Dr Shroff’s Charity Eye Hospital made presentation on “Subjective refraction: Techniques to improve the quality of prescription”. He defined refraction and difference between subjective and objective refraction. He described the methods to ensure accommodation is relaxed and also explained the steps in subjective refraction. Mr Suresh explained Fogging, its aim, principle and procedure, Duo- Chrome test, its aim and procedure, Jackson Cross Cylinder (JCC) and Binocular Balancing. He also explained near addition for reading and prescribing near addition to the patient. Towards end of his presentation, he shared the clinical tips for trial lens and trial frame.

Dr Praveen Vashist, Dr RP Centre shared the experience of RP Centre’s primary centres the way through ASHA workers community level integration is achieved. Dr Praveen emphasized that if we have to achieve Universal Eye Health, then success in outreach is important.

Ms Jyotsana Optometry faculty from Dr Shroff’s Charity Eye Hospital made presentation on “Visual acuity assessment in children: how it is different from adults”. She explained the different methodologies for assessment of children and the ways for better diagnosis.

Mr Birendra Pratap Singh further made a presentation on “Refraction and Guidelines prescribing in Children”. He started his presentation by explaining how it is different from normal refraction. He discussed choice of refraction for different age groups (infants, pre- school and school age group). Further he explained different type of Pediatric refraction and also shown refractive changes from birth till 3 yrs. He informed that when considering prescribing glasses for a young child (birth to six years), what questions must be considered and importance to correct refractive error in children. Further he discussed guidelines for prescribing eye glasses for young children with
Strabismus, guidelines for prescribing eye glasses for young children and things to be kept in mind while prescribing spectacles for infants.

**Mr Nitin Chaudhary** from Hoya made a presentation on “Innovations in Cataract Management” and spoke on their new product – lens – introduced in the market, its feature and the pros and cons of it and how the improved technology can result in a better surgical outcome for cataract surgery.

**Mr Prem Kumar Singh** then made a presentation on “To prescribe single vision, bifocal or multifocal: A need based approach and adaptation tips”. He explained the method of prescribing single vision, bifocal or multifocal lenses.

Further to this **Mr Suresh C Yadav** presented “Spectacle frame selection, Fitting assessment and Troubleshooting”. He said that most of the time we get confused on which frame will suit to our face and thus he shared the steps of ideal frame selection. He discussed the category wise ideal frames and also suggested to avoid certain frames based on face shapes. He also discussed the steps for fitting assessments, frame balancing, how to measure Inter Pupilliary Distance (IPD), steps of trouble shooting, order accuracy, priscrition accuracy, IPD accuracy and marking & fitting accuracy.

On day 2, **Dr Shalinder Sabherwal** from Dr Shroff’s Charity Eye Hospital made a presentation on “Ocular injuries reporting to the centre: What you as primary eye care professional does”. He explained do’s and don’ts when a patient reports with a foreign body injury. He discussed on how the patients with ocular injuries should be treated with care.

**Mr Animesh Das**, Eye Bank Manager from Dr Shroff’s Charity Eye Hospital presented “Importance of eye donation”. During his presentation, he shared the eye banking status of India and presented the facts and figures of eye donation, cornea collection, cornea surgeries performed and gaps in services. He shared the findings of a study (Shamanna BR, Dandona L, Rao GN. Economic burden of blindness in India. *Indian J Ophthalmol* 1998;46:169-172) that the life expectancy of a blind child in India is 15 years less than that of a sighted one and also shared that 17-18% of childhood blindness is due to corneal disease. He discussed about different types of Eye Donation, eye recovery/ retrieval procedures, eye donation process and Do’s & Don’ts for eye donation.

Further all delegates were divided in four groups and were given hands on training in following areas:

1. **Slit-Lamp examination & Applanation Tonometry:**
   - To assess the anterior segment of the eye.
   - Anterior chamber depth assessment and Von-Herick grading.
   - Types of illumination and its use.
   - Intra Ocular pressure (IOP) assessment with the help of applanation tonometer.
   - Cataract grading with the help of different types of illumination.
2. Retinoscopy Tips :
   - Quick assessment on paediatric refraction techniques.
   - Near Retinoscopy in less than 3 years age group.
   - To check the lead of accommodation & lag of accommodation by the technique of Dynamic retinoscopy (MEM) method.
   - Correlation between Static & Mohindra Retinoscopy Technique in Paediatric.

3. IPD measurement and Fitting Alignment :
   - To take correct Interpupillary distance (IPD) with the help of ruler, pen torch and OHP marker. As an examiner it is also important to measure the monocular IPD.
• IPD to be always taken after frame balancing and adjustment before fitting the lens in the frame.
• IPD should be marked in every patients whether its single vision lens, bifocal lens, Progressive lens.
• Comfortable frame selection and lens suiting to patient’s personality and work profile.
• Not to discard Progressive marked dummy lens unless final glass dispensed to customers.
• Progressive marked dummy lens helps in trouble shooting.

Participants undergoing hand-on training on IPD measurement and fitting alignment

4. Vision & Refraction Technique in Children:
   • To use different visual acuity chart according to age group.
   • Techniques of assessing visual acuity in pre verbal child and uncooperative child with the help of Teller’s acuity card / Cardiff.
   • Techniques of assessing visual acuity in Verbal but illiterate child with the help of Lea symbol / Allen’s pictures / Pedia picture chart.
   • Techniques to assess contrast visual acuity.

Discussions and Technical Questions

Q 1. Why not to correct < +2.00Dioptre hyperope in age group 3-5 years?
   Ans. Because various studies says slightly emmetropization process remains happening at this age group. So we need to do cycloplegic refraction to find out any amount of latent hyperopia is reaming.
   • If YES , then do strong fogging.
If No, then leave under +2.00 Dioptre hyperopia.

Q 2. In age group of 1-2 Yrs, what amount of astigmatism should be prescribed?
Ans. More than 2.00 Dioptre cylinder in case of with the rule astigmatism (WTR) or against the rule (ATR). In oblique astigmatism prescribe more than 1.50 Dioptre cylinder.

Q 3. What is the importance of Micro Itching in Progressive uncut lens or blank?
Ans. Micro itchings are laser engraved marks on each and every progressive lens which are separated at a distance of 34mm from each other. They help in assessing the fitting of progressive according to the Interpupillary distance.

Q 4. What kind of lenses to be suggested for professional pilots?
Ans. Before suggesting any lenses, we need to assess the visual need of the patient. Pilots have to see a lot of blinking lights on the dashboard of the plane and runway in front. Single focal or bifocal lens will not work well for these professionals. The image jump in bifocal lens will create problem to them. Hence, Progressive addition lens are the best lenses for these kind of profession.

Q 5. How many days will take to adjust a newly made progressive lens?
Ans. Every new progressive lens user patients need to visit clinicians for few golden tips to use progressive lens. The clinician will explain Dos and Don’ts to newly progressive wearer like:

- Head & neck movement with glass.
- Watch TV / movies of your favourite with Progressive lens on.
- Avoid onset driving with the lens.
- Keeps your old glasses at bay.

Programme ended with certificate distribution and vote of thanks by Mr AK Arora, CEO, Dr Shroff’s Charity Eye Hospital and Mr Phanindra Babu Nukella, CEO, VISION 2020 INDIA.
Gratitude:

- Our sincere thanks to Dr Shroff’s Charity Eye Hospital for their support towards conducting this training programme
- Our special thanks to all resource persons for their effort and time to make this programme successful by disseminating their institutional and individual vast experience and knowledge
- Our sincere thanks to CBM for their support
- We are sincerely thankful to CAB Members for their support for the training programmes
- Our sincere thanks to all the delegates, participated in the programme and thanks for their encouraging response
- We are thankful to the leaders of our member organisations for sending their representatives to attend the training programme
- We are extremely thankful to each and every one who supported us to make this programme a grand success