Mobile Teleophthalmology

Primary care and Screening Model
SNTOP – MOBILE UNIT
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Mobile Teleophthalmology

PRIMARY CARE MODEL
Mobile Teleophthalmology

- Primary Care
  - It is a mobile unit with all latest equipments for a comprehensive eye examination and a facility to interact with ophthalmologists at the base hospital Sankara Nethralaya, Chennai for diagnosis and management of eye problems.
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Patients at Camp Location 8.00 am

Registration & History Recording

Vision Checking

Cataract Patients

Counseling

Non-Cataract Patients

Refraction + IOP

Spectacles
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- Refraction + IOP
  - Teleophthalmology Criteria
    - Slit Lamp - Photographs
      - Dilation
      - Funds - Photographs
      - Indirect Ophthalmoscope - Photographs
    - Teleservice with Consultant
      - Counseling
      - Spectacles
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**Patient Registration:** With support from Camp sponsors, local volunteers (mostly students from schools and colleges) record the patient's details like name, age and address in the case sheet. Camp patients are then given identity cards.

**Vision Check:** The patients who are registered undergo screening by Sankara Nethralaya Social Worker. Vision charts, such as the Snellen and E type charts are used for screening.
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**Refraction:** Refers to the examination of the eye in order to determine whether a spectacle prescription is necessary. A Specialist Refractionist from Sankara Nethralaya carries out a comprehensive refractory examination.

**Slit Lamp Examination:** Apart from this, a slit lamp examination is carried out.

**IOP:** Patients above the age 40 have their Intra Ocular Pressure tested. Those who need / prescribed glasses (spectacles) are sent to the Optical Service and those who need Tele-consultation from our Ophthalmologist at our Central Hub are sent to the next step.
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**Teleophthalmology – Slit Lamp:** The slit lamp is a microscope with a light attached that allows examining the eye under high magnification. The Optometrist will examine the eyes and take necessary pictures.

**Dilation:** Dilation enlarges the size of the pupil and makes the pupil non-reactive when bright light is shown into the eye. Common eye diseases such as glaucoma, diabetic retinopathy, cataracts and other eye diseases are detected after dilation.

**Teleophthalmology Fundus Camera:** The patient is asked to stare at a fixation device so the eyes are still. While the photographer is taking the pictures, the patient will see a series of bright flashes. The entire process usually takes approximately five to ten minutes.
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Teleophthalmology Consultation: Slit lamp / Fundus Picture and Indirect Ophthalmoscope pictures taken and along with patients’ details transferred to Sankara Nethralaya-Central Hub (Batch of 5 patients). After Video Conference is connected with the central Hub, patients, Refractionist and the Consultant at Sankara Nethralaya -Central Hub discuss about the patients problem. The Ophthalmologist at Sankara Nethralaya makes the final diagnosis and prescribes treatment.
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**Glass Sales Counter:** Facilitates patients who are prescribed glasses (spectacles) to buy scientifically tested quality glasses in the campsite. Our trained personnel make suitable lens with the help of the grinding machine, mounts the lens in the frames chosen by the patients and delivers the finished spectacles to the patients on the spot.

**Counseling:** Patients counseled at the campsite. Eligibility criteria for free surgery is explained to the patients.

**Awareness Meeting:** The following short films are screened at the campsite between 7 & 8 pm. A film on Eye Donation – starring Super Star Rajinikanth, a film on Diabetic Retinopathy – starring Shri Subbu Arumugam – Villu Pattu Artiste and Cataract & Glaucoma / Diabetic Retinopathy Presentation. All through the program, our Refractionist and Social workers are available to answer any questions.
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- Central Hub at Chennai & Karnataka
  - Tele-ophthalmology camps
    - 7 Districts of TN and AP and 6 Districts of Karnataka
    - Works for 24 days a Month (Inclusive of 6 days for DRP)
    - Average 120 patients outside the mobile unit and 30 patients for Tele-consultation inside the Mobile unit everyday.
    - Spectacles given to those patients who require a new pair (within 30 min) at a nominal cost.
    - Patients advised for further investigation or surgery are referred to local ophthalmologists or Sankara Nethalaya Jaslok Community Ophthalmic Center.
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- Central Hub at Chennai & Karnataka
  - Tele-ophthalmology camps (Contd..)
    - Everyday Awareness Programme for Public in the evening
    - Monthly once Tele-CME using the Mobile unit for local Ophthalmologists, Refractionists and Nursing Assistants.
    - Three month once “Meet the doctor” programme for local public to interact with Sr. Ophthalmologists of Sankara Nethralaya.
    - All the above are done - FREE OF COST
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SCREENING MODEL
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- There are three important components of Diabetic retinopathy screening programme :-
  - Recruitment strategies
  - Screening Methods
  - Providing treatment to sight – threatening retinopathy
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- Recruitment strategies of diabetics for diabetic retinopathy camp
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Screening methodology
At DIABETIC RETINOPATHY CAMP SITE: All diabetics will undergo complete dilated eye examination. The patient flow at campsite will be through following 10 counters.

Patient flow at the camp site

1. Registration
2. BP Check
3. Vision Check
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4. IOP
5. Hand held Slit-lamp
6. Height & Weight
7. Dilatation & History taking
8. Teleophthalmology
9. Counseling
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Thanks