

## TELE-OPHTHALMOLOGY SERVICES IN TRIPURA



### Problem Statement

Dearth of infrastructure and trained human resources in primary health care setting for ophthalmic services was a huge challenge for Tripura. Most ophthalmic specialists and assistants resided and functioned in urban areas. Consequently, urban health centres such as the Medical College was grossly overburdened, despite being mandated to provide tertiary care primarily. In addition rural people were spending too much time and money to avail eye care services from urban areas.

To reduce the increase in patient out of pocket expenditure and case load at the secondary and tertiary levels, the government of Tripura initiated the Vision center program with an objective *“to provide primary & preventive eye care to the rural population of Tripura using advanced information & communication technology.”*

### Project description

Vision Center is the main feature of the Tele-ophthalmology program. There are 40 Vision Centers (VCs) established in each block of the State which are connected to the secondary care center at IGM Hospital, Agartala through intranet (TSWAN) & internet (Tulip). Each Vision center is managed by Ophthalmic Assistant who examines the patient and is also responsible for managing computer, data entry, Tele-consultation and patient counseling. After conducting eye examinations the Ophthalmic Assistant enters patient details in the software application with a picture of the affected eye. Patient specific data is then reviewed at the IGM Hospital by the Ophthalmologist, who diagnoses the case and decides on treatment modalities.

Vision centers work on the principles of low-cost technology and resource sharing. Each

vision center uses very simple imaging instruments and simple digital camera for initial screening of the patient. The specialist using his computer can access patient details and advice for treatment. Two different software applications are used in the vision

#### **Project Impact**

The project has computerized screening & outreach component of the Blindness Control Program, which has helped in identification of cases with preventable blindness.

The project has also been successful in providing primary & preventive eye care at the door steps of people. Availability of Vision Centers at the block level has improved service utilization by women and children and has also improved timely referral of complicated cases. From 2009 to 2012, Vision Centers have screened 1, 51,979 patients. Out of this 6.3% were referred to the IGM Hospital, Agartala for further treatment and about 15% of the patients visited Vision centers for review and follow-up. Vision Centers have helped to reduce patient load at higher institutions. Simple refractive errors and minor ailments are treated locally with the help of vision center.

Most of the patients are now being referred to the Vision Centers from Health Sub Centers and PHCs for primary screening. Even the Self Help Groups and NGOs refer patients to the Vision Centers for screening and primary care. Till date the Vision center has referred around 2,500 cases of cataract to the IGM hospital for

center- for patient-wise data transmission, Arvind Eye Care provided software is used and for Audio-Video chat Argusoft Communicate @Work software is used. Management of the project and annual maintenance is out-sourced to the private provider.

surgery. In addition the centers have also managed to identify 70 odd cases of Glaucoma & Diabetic Retinopathy.

#### **Scalability**

Project is focused on specific need of the community and this is the reason it has achieved its objectives. This project has the potential to be scaled in the other parts of the country, which can further help address resource constraints in rural areas and improve screening and timely referral under Blindness Control Program.

#### **For further details contact**

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