



VIRAJ HEALTH

Eye Clinics Online



Objective: To develop a comprehensive fully integrated digital consultation platform for community screening, preventative care and delivery of shared expertise to address barriers to healthcare access through a social enterprise business model.

Background: Advancements in healthcare capabilities have been limited in their application partly by barriers to healthcare access. These manifest in different ways. Insufficient education/ lack of appreciation of the importance of healthy living, poor social support, and mobility impairment are the prevalent causes in developed societies. Whereas in under-developed societies, geographical barriers such as distance to nearest health facility, financial constraints, or lack of sufficient trained health professionals are prevalent contributing factors. Telemedicine or the provision of remote healthcare is a promising solution to these problems, which eye clinics online (ECO) aims to deliver.

Ophthalmology is one of the very challenging sub-speciality of medicine and requires correlation of eye findings with general systemic health and other patient demographics. It requires a multi-disciplinary approach in optimizing diagnosis and management of patients with ocular complaints. According to WHO, the number of people with visual morbidity worldwide are in excess of 285 million of which 39 million are blind with non-uniform distribution across geographic locations and across different age groups but a majority of these could have been prevented with timely diagnosis and intervention. Diseases amenable to a community based screening are cataracts, glaucoma, age related macular degeneration, corneal opacities, diabetic retinopathy and childhood blindness, which account for 48%, 12%, 9%, 5.1%, 4.8% and 3.9% of the global blindness respectively, as per the recent WHO statistics. In the paediatric age group, refractive errors and retinal conditions such as retinopathy of prematurity and retinoblastoma are potentially preventable and treatable. However, in developing countries, the ophthalmologist to population ratio can be as low as 1:200,000, precluding adequate screening.

There are limited number of fellowship trained eye specialists globally and this creates a real complex scenario where approach and management of patients with ocular disorders is compromised due to lack of expertise. There are plenty of good cataract surgeons around, but unfortunately there is very limited knowledge about other blinding conditions such as age related macular degeneration, glaucoma and diabetic retinopathy which constitute more than 50% of reversible cause of blindness.

Digital solution: As an attempt to address this, Project i2Eye in collaboration with the well-wishers and supporters, would like to propose a unique online platform of **Eye Clinics Online (ECO)**, which will be moderated by global panel of eye experts.

Adjunct Associate Professor Rupesh Agrawal, Director and co-founder of Viraj Healthcare Foundation (VHF), is an accomplished ophthalmic surgeon with numerous scientific publications in prestigious medical journals who regularly shares his expertise at international scientific conferences. Through ECO and project i2Eye, he aims to contribute decades of his experience of practicing Ophthalmology in India, Singapore, and the United Kingdom through humanitarian efforts to further enhance this initiative.

The expert panel moderating ECO will be: A/Prof Rupesh Agrawal, Mr Carlos Pavesio, Dr Andres Rousselot, Dr Sumita Phatak, Dr Manoj Khatri, Dr Rajiv Raman and Prof Vishali Gupta. There will be many more experts who will be volunteering their expertise under ECO. Primary eye care centre from across the world will post complex cases online with all the details on this forum and expert will be automatically assigned a case to discuss and provide his valuable inputs. The platform will be completely encrypted and all the necessary regulatory requirements will be in place for sharing patients clinical information.

Also, the images** (collaboration with Forus), clinical records and medications can be shared using this platform. While the platform will definitely enable colleague ophthalmologist and physicians to interact with experts in management of complex eye cases, it will also allow patients to log in and seek guidance or inputs from the specialist. The platform will allow us to build up a standing database of complex ocular patients worldwide, which can further facilitate research and global collaboration. We would hence invite the visionaries and philanthropists in supporting us generously for developing this platform and also spreading awareness about this platform to optimize the application of this platform amongst the primary eye care clinics.

The objective of the program is to equip primary, secondary and tertiary eye care centers with an eye testing platform and remotely connect them to specialists across the world who can perform read the fundus images and provide screening diagnosis.

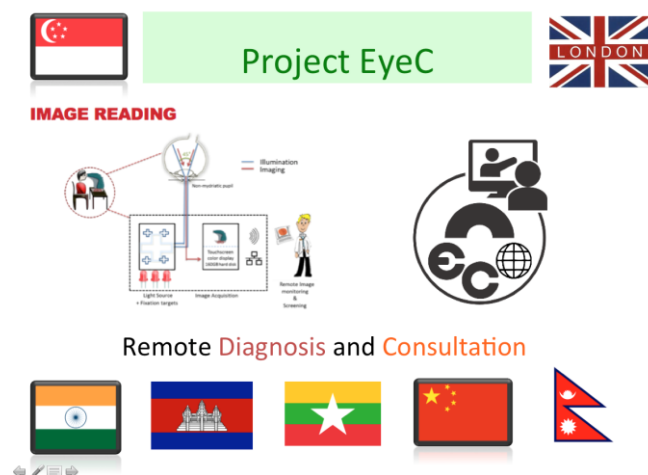
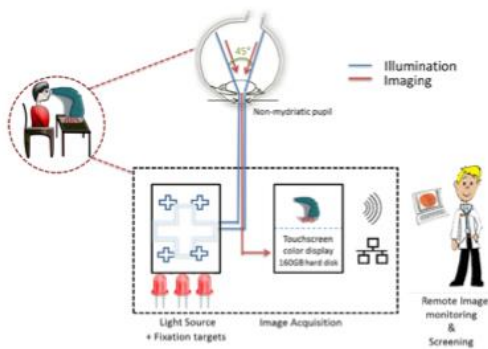


IMAGE READING



Collaboration: In this model, we will work with Forus Health to install an ophthalmic imaging device (3nethra classic) in primary, secondary and tertiary eyecare centers to screen for common eye problems such as diabetic retinopathy, glaucoma, ARMD and cataract. The Forus TriNetra Classic fundus camera can be directly sourced from Forus and installed at desirable location and using the Forus Care Images can be shared with specialists. All the devices are connected will be connected to cloud-based platform which will be given direct access to a group of empanelled ophthalmologists who remotely diagnose the cases using an **android App on their cell phones or tablet**. By increasing our touch points to

conduct regular testing we can help detect common eye problems early, which can lead to timely intervention and cure.



Forus

Forus Health will provide the total technology infrastructure and timely reporting of each case. The only investment is to have an operator and we can train an existing staff to effectively operate the device/platform. In this shared model, Forus Health will become

the *infrastructure provider* connecting eye screening centers to specialist doctors. The screening centers are called '**Subscribers**' and the specialists participating in the grading or review of the images are called '**Reviewers**'.