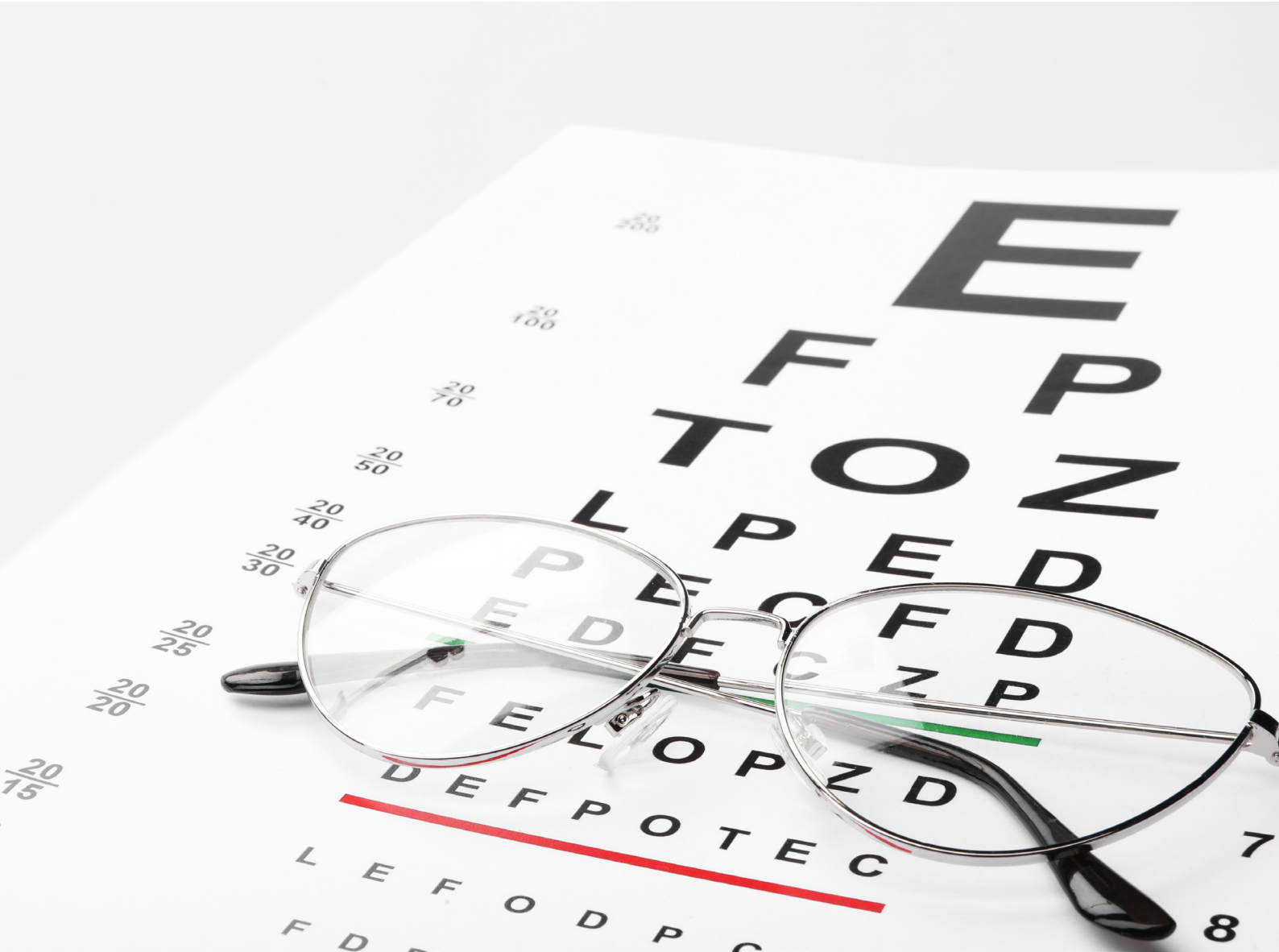
cbm
global disability inclusion

Sustainability Review
2025

# Sustaining Inclusive Vision Centres in India



# Executive Summary

The Vision Centres model is a well-established Indian approach to providing eye care at the community level. In 2017, CBM India Trust's partner, Dr Shroff's Charity Eye Hospital, was supported to transition from its traditional eye camps provision to pilot an inclusive Vision Centre approach. Funded by CBM UK, the Inclusive Vision Centres (IVCs) project provided accessible and affordable eye care at the community level through four newly established local, inclusive eye clinics in Saharanpur, Uttar Pradesh. This project ran from 2017 to 2021, and emphasised community engagement, training local women as certified ophthalmic paramedics, accessible community clinic infrastructure and the use of tele-consultation technology to reduce travel for hospital services and enhance service delivery.

The IVC model, which included a cross-subsidy approach to ensure affordability, has been replicated and expanded, with nearly 200 IVCs now supported by CBM India, demonstrating sustained impact and growth. This paper examines the factors underlying this success and the sustainability of the project at different operational levels: IVC's, Dr Shroff's Charity Eye Hospital, the wider community, Government,  and CBM India Trust.

**The IVC level:** The project established four IVCs and focused on sustainability from the design phase. This was realised through careful local feasibility assessments, standardised delivery approaches, and strong community engagement. The project emphasised training local staff, including women, and developing partnerships with local government agencies. Financial sustainability was achieved through planned revenue generation from services and cross-subsidisation. The pilot's success led to the expansion of the model, with 200 IVCs now supported by CBM India. Key factors promoting sustainability included effective human resources, community engagement, and stakeholder support. However, challenges included limited focus on disability data collection and the discontinuation of some assistive technologies. Despite these challenges, the IVC model has shown significant success in providing accessible and quality eye care services.

**At the hospital level:** Dr. Shroff's Charity Eye Hospital adapted to a new model of community-based eye care, responding to the feasibility studies which identified local needs and customised IVC structures, services and support. Strong working relationships between the hospital and IVCs were key to success and have been maintained, with a significant portion of surgeries today referred from IVCs. Since the pilot project, the hospital's management information system has been expanded to include vision centre data, improving communication and clinical support. However, the new management information system did not include disability data, established at IVC level during the pilot. Staff also noted a decline in disability awareness among hospital staff over time. Training alone has proved insufficient to sustain changes in attitudes and requires continued prioritisation.

**At the community level:** the project involved extensive mobilisation to identify and train frontline workers, including community health workers, vision centre assistants, and technicians. These workers received disability awareness training and orientation on eye care services. Community engagement was crucial for generating health-seeking behaviours, with door-to-door and school-based screenings helping to identify those in need of eye care. The project successfully empowered 25 young women from impoverished backgrounds, providing them with training and roles as vision technicians and centre managers. This led to some positive community changes with respect to gender awareness.

Sustained community awareness and engagement have been key to the project's success, with average walk-ins at IVCs reaching 20-30 per day, contributing to financial sustainability. However, challenges included mobilising people with disabilities due to physical and logistical barriers, and difficulties in retaining the focus of frontline health workers who are often busy with other government projects or who have moved away.

**At the government level:** the project connected with established government health systems, including community health workers, and by developing referral pathways. Sustained outcomes include the integration of IVCs into the formal government health system in Karnataka and Haryana, making them part of the primary care structure and driving referrals to secondary services. Eye care services are now included in state government strategies, with bilateral agreements signed to continue the work. Factors promoting sustainability included increased government interest as IVC impacts became evident. However, the limited initial collaboration required more ongoing engagement than initially anticipated.

**At CBM India Trust level:** the success of the IVCs project led to significant learning outcomes and expansion. Key factors promoting sustainability included a long design phase with community consultation, effective human resources, strong stakeholder engagement, and a focus on quality assurance. Financial sustainability was achieved through the cross-subsidy model. Despite challenges acknowledged above, CBM India has become proficient in managing IVCs and securing additional funding for further expansion.

This initiative demonstrated a successful approach to providing accessible and quality eye care at the community level, significantly improving lives. While the model has subsequently expanded to nearly 200 IVCs, continuous improvement is needed, especially in disability-inclusive practices. Strengthening disability awareness, accessibility, and consistent staff training is essential. Looking forward, CBM India aims for a sustainable future with digitised systems and clean energy, enhancing environmental stewardship and reducing costs. By addressing these gaps and innovating, CBM India can ensure the IVC model remains a benchmark for inclusive, accessible, and sustainable eye care services.


**Above: Awareness raising session in the community.**

# Introduction

From 2017 to 2021, CBM UK supported the Inclusive Vision Centres (IVCs) project in India. The funding provided by CBM UK enabled CBM India's hospital partner, Dr.Shroff's Charity Eye Hospital, to set up and run four new IVCs, designed to meet eye care needs of communities at the local level. Vision Centres were not a new concept in India, but rather a recognised approach established for over 15 years. However, for CBM this was a pilot project to support our hospital partner to use the approach and stood in contrast to previous eye care provision through medical eye camps. While eye camps reached many people, they required people to travel to seek eye care services. In contrast, IVCs brought eye care to the local level making it more accessible and targeted all people, including people with disabilities. CBM's additional development was to make the Indian Vision Centre approach inclusive.

The CBM UK funding enabled an initial CBM pilot project, managed by CBM India Trust[1], which has since been successfully replicated and extended into multiple projects with close to 200 IVCs supported by CBM India today. CBM India Trust conclude that, for these communities, eye services are now:

**"Locally based, accessible and affordable with quality standards. With technology that works better, such as tele-consultation, we're offering comprehensive eye care screening at primary level, as well as at hospital level."**

This implies real sustained impact and growth, and the purpose of this review is to explore some of the underlying factors that have enabled this success.

A series of key stakeholder interviews were conducted to examine the factors underlining the success and sustainability of the project at different operational and impact levels. The analysis focuses on elements that contributed to, or hindered, sustainability at three critical operational levels:

- The community-based IVC level
- Dr Shroff's Charity Eye Hospital level
- The wider community level.

The review then examines whether government engagement helped embed the project approach and reflects on the valuable lessons learned by CBM India Trust. These lessons enhanced their ability to set up and run IVC successfully with hospital partners, as well as support the growth of this approach within their eye health portfolio. The review concludes with a summary of the critical factors that supported, or hindered, the sustainability of this successful project.

1 CBM India Trust was registered as an independent entity in 1994.

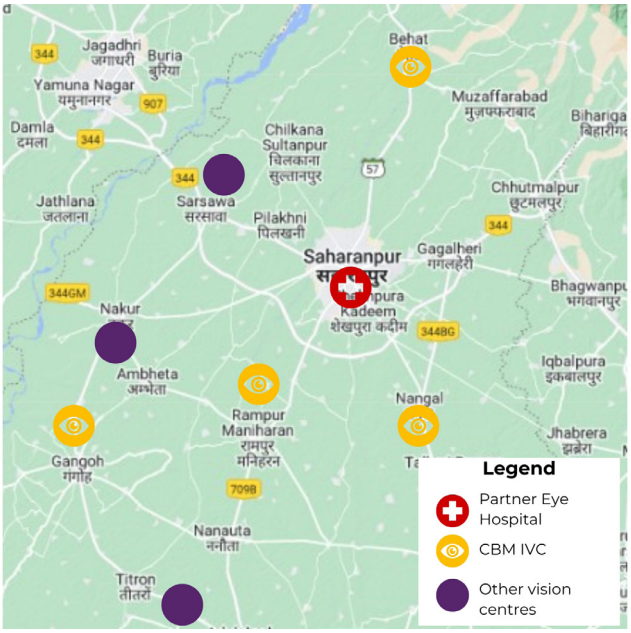
# A Quick Snapshot of the IVC Model

The original funding[2] supported a project that aimed to provide eye health services to over 65,000 people between 2017 and 2021. The project was established because, for many people in India, particularly those living in poorer rural areas, eye care services are out of reach - both financially and geographically. To address this, the project established local eye health services and linked these to established primary health care centres, bringing sight-saving care to the community and reducing the need for long-distance travel to hospital-based eye care services. As part of this project, four new community-level IVCs were opened in Saharanpur, Uttar Pradesh, one of India's poorest regions, by CBM hospital partner, Dr Shroff's Charity Eye Hospital. The IVCs were inaugurated between April and August, 2018, in Nagal, Rampur, Gangoh, and Behat (see map below).

Shifting away from screening camps in western Uttar Pradesh, CBM India supported Dr Shroff's Charity Hospital to launch a local and inclusive clinic model. **The new community-based IVCs provided refraction, affordable glasses, and identified potentially blinding conditions like cataracts and glaucoma.**

**Well qualified, competent technicians were paid by the project and assigned to run the clinics, enabling comprehensive screenings to be performed close to where people lived. Community engagement was key to developing staffing required for running local eye services.** The successful recruitment of 25 young local women who were trained to run the IVCs as certified ophthalmic paramedics (COPs), was a major factor in the project's success. However, considerable rapport building with men and elders at the community and household levels was required to enable these women to take up this opportunity.

**Greater community awareness of eye health supported better eye care seeking behaviours. This is important because blindness can often be avoided with early identification and treatment.** An eye health campaign, involving technicians or trained Community Health Workers visiting communities for awareness raising, became an essential component of the model from day one. Establishing strong connections with Community Health Workers and aligning with community level health services were fundamental to enabling this outreach. A significant focus for CBM was ensuring people with disabilities could access primary eye care services, with specific effort made to reach community members with disabilities and ensure IVC buildings were accessible through the provision of ramps for example.




**Above: Map showing location of partner hospital, CBM IVCs and other vision centres without an active component of disability inclusion.**

2 CBM UK provided financial support with funding from the L'Occitane Foundation.

**Local IVCs help to keep costs down and limit the requirements for people to travel to hospital hundreds of miles away, both of which represent real barriers to access.** The use of new technology (i.e., video link) enabled eye hospital medical teams to examine patients in the IVC from a distance (i.e., via tele-consultations). This allowed specialist doctors to establish whether patients needed to travel to the hospital for treatment or whether they could simply send a prescription for medication directly for management at the IVC. As a good indicator of growth, almost 75-80% of surgeries performed at Dr Shroff's Charity Eye Hospital in Saharanpur are today referred through a network that now includes 15 Vision Centres[3].

**Affordability was a key component right from the beginning. The Indian Vision Centre model functioned on a cross-subsidy model of eye care delivery, providing free or highly subsidised eye care services.** This meant that people attending that were able to afford to pay for services, including the referral services (i.e., cataract and other speciality surgery), cross-funded services for people who were not able to afford them. Even for those that paid, prices were kept low. For example, spectacles were sold at subsidised prices and not at commercial prices, and other services and the value-add services (such as hypertension testing, blood sugar tests and some premium intraocular lens (IOLs)) commanded only a nominal fee[4]. The expectation for this model was that, over a period of time, if run well and with good community outreach, more people able to pay the nominal fee would come to the centres for services and help sustain free basic eye services for those unable to pay.

**The IVC business model combined financial sustainability alongside equitable access.** A percentage of the resources raised was retained by the hospital partner to cover costs and help move towards running IVCs without the need for external support over time.

**Today, IVCs are expected to be financially self-sustaining by the end of an initial 3-year funded phase.**

Since the pilot project, CBM India staff report having become experts in this inclusive eye care approach and the IVC model is now well-established as a significant part of their inclusive eye health work. CBM India now has active Vision Centre partnerships with 15 eye care partner hospitals across India, both NGO hospitals and Government hospitals.

Front page: A ramp at the new hospital in Saharanpur ensures people with disabilities can access the facility.

3 These Vision Centres have been supported by various partners - Standard Chartered Bank, CBM, Seva foundation, Orbis.

4 Nominal fee is INR30 (GBP0.28) for Ophthalmic Outpatient Department charges. Value-added service charges: INR50 (GBP0.46).

# How to set up an IVC

1. **Conduct IVC market feasibility plan:**

   This identified gaps in local eye care provision, the necessary human resources required to meet that provision, and issues related to access to services, etc. Appropriate IVC locations and accessible buildings were acquired.

2. **Community outreach:**

   Significant activity was undertaken to generate local demand for eye services, including among people with disabilities, and identify community-based IVC staff. This included providing opportunities for young, local women and working with the community to overcome gender barriers to their employment.

3. **Clear IVC management structures established:**

   i. The IVC financing model was set to balance income generation alongside free services for poorer households, based on the market feasibility plan.

   ii. Basic IVC performance targets were set. This included, for example, number of people visiting IVC per day; number screened and referred to the hospital centre per month for surgery; number of blood sugar checks (for diabetes); and number of people accessing other in-built services.

4. **Disability inclusive eye centres and services established:**

   i. IVC buildings were required to meet minimum accessibility requirements.

   ii. IVC staff were sensitised on disability inclusion. Staff were also equipped for making referrals to other health care and rehabilitation services.

   iii. The staff were also trained to use Washington Group Short Set Questions in IVC as part of disability data collection and to support a wider inclusive approach.

   iv. Additionally, the project team distributed “aid and appliances” for people with disabilities at local IVCs. This included wheelchairs, hearing aids, walking canes and other assistive technology which were budgeted and provided as part of the project.

# The Sustainability of Impacts

Here, we look at the specific approaches and activities at different operational levels, and consider what has sustained or fallen away, and the reasons that might explain this.

## Inclusive Vision Centre level

### Who was involved and what was the approach?

The pilot project funded four IVCs, marking the first initiative of its kind for CBM India. Previously, CBM's standard approach was for their international funding to go directly to hospital partners and for them to define what they wanted to fund. In contrast, this pilot pushed CBM India and its hospital partner, Dr Shroff's Charity Eye Hospital, to think beyond their tertiary services practice model, and explore how to deliver vision care closer to communities, while ensuring greater disability inclusion. This shift led to an adaptation of the recognised Indian Vision Centre model, designed with greater consideration of inclusion. Comprehensive primary eye health services were launched in four primary health care centres, with inclusion and sustainability integrated into their design.

Sustainability was considered right from the beginning, in terms of three aspects:

- **Project sustainability:** careful consideration was given to IVCs local feasibility via care needs assessments and attention to the local market, ensuring not to duplicate services provided by other institutions. A standardised delivery approach was developed for each IVC that included inclusive infrastructure, protocols for working, procurements, human resource requirements and the services which could be offered. Learning and practice loops were built in from the beginning leading to important learning outcomes for CBM India and their partner.

  **From the initial pilot, the number of IVCs has expanded to an incredible 200 IVCs. These are now managed by CBM India as part of a large-scale project for the team and their hospital partners.**

- **Sustainability of inclusive eye care services:** Careful decisions were made to ensure IVCs were strategically located in areas that people could easily reach, encouraging walk-ins and enabling an easy commute. The IVCs were also made accessible to make it easy for people with disabilities to access eye care services. To ensure that the programme continued beyond the funding period, local staff were trained and IVCs now have disability aware technicians. The pilot also focused on developing IVC impacts beyond the centre's own services, by building strong partnerships with local government agencies and institutions through networking, thus developing a wider referral pathway system for services other than that offered at the IVC.
- **IVC financial sustainability:** How the IVCs would become financially self-sustaining was an important dimension of the project planning and IVC start up. Revenue generation from the sale of spectacles and value-added services, such as testing for blood pressure, diabetes and small fee as consultancy charges, were explored to meet the financial sustainability of the IVCs. A cost-benefit analysis was done, and the rate of various services were calculated[5] to meet the expenses related to distribution of support and assistive devices to people with disabilities.

5 Financial sustainability calculation in Vision Centres: Total Revenue - IVCs total expenses. IVCs contribution (including: Ophthalmic Outpatient Department 100% revenue, optical revenue 31%, value added services (blood pressure, sugar and syringing) 100%, medicine 50%, paid surgery 15% contribution to Vision Centres, free surgery INR200 (GBP1.86) per surgery to IVCs).

Other evidence of the model's expansion and sustainability at IVC level, since the pilot ended, includes:

- **Hospital partner's management information system (MIS) was expanded to include IVCs' management data.** Hospital staff are now able to view IVC management updates via an online dashboard. This new online system facilitates easier monitoring (quarterly clinical audits) and support, with less reliance on physical visits for monthly data collection and exchanges between the community optometrist and eye centre vision technicians. Having clinical data available online enables the optometrist to review it for gaps, assess how it is being used, and follow up as needed to check skills and examination practices, etc. IVC technicians reported regular ongoing optometrist observation visits, but the system is now less dependent on this. This amounts to a significant strengthening of the clinical system. Unfortunately, the pilot project's inclusion of the Washington Group Questions at IVC level – an important dimension of the inclusion adaptations - has not sustained and was not carried through into the new information systems (more on this below).
- **Shift in attitudes and step change in care protocols.** The IVC protocols established during the pilot were an important shift, with some protocols, such as doctor safety, having also been taken up by government. For example, protocols to provide doctor protection and patient safety during COVID-19. In fact, while traditional eye camps were restricted during COVID-19, the government allowed the IVCs to run and continue providing one to one services during lock-downs with a lot of precautions. Although COVID-19 restrictions are no longer being enforced, the strict clinical protocols remain. Protocols for disability inclusion included conducting an accessibility audit and providing training on disability inclusive behaviours.
- **Widened sources of start up financing of IVCs.** Finance now comes from multiple sources in India, with many corporates very interested in IVCs. Public-private partnership has been key to this evolving model, alongside the systems strengthening for eye care.
- **IVCs have been integrated into the formal government health system in two primary health care systems in the States of Karnataka and Haryana.** By working in partnership with the State governments, IVCs have now become part of the primary care structure and an important referral pathway to secondary services in two CBM focus States. Having previously shown little interest in eye care, bilateral agreements (Memorandum of Understandings) have been signed between these State government and CBM India, and eye care has now become part of State governments' health strategy, which could be replicated throughout the all States.

## Factors promoting sustainability at IVC level:

**Scoping activities during the design stage:**

A considerable amount of time was spent at design stage in scoping activities. These included:

- **Feasibility studies:** Before opening the IVCs, CBM India ensured an extensive feasibility study was conducted in thirteen potential locations. This was rolled out at the community level, using a standardised format to identify the existing resources and community resources, demographic profiles, identification of any frontline worker already providing any eye care services in the community (and their contact details), and any spectacle shops, optical shops or ophthalmology units. CBM India's partner, Dr Shroff's Charity Eye Hospital, then pinpointed four locations as 'high potential' where no services were being provided, but where there was potential access to trained eye care staff.
- After the feasibility study, **business plans** were developed: For each high potential location, potential eye service demand was calculated against population sizes and the potential number of trained health workers in the area. For example, where a location had a population of around 200,000, the business plan was designed around a minimum eye service demand of 10% (20,000 people), split into 25-40% people requiring spectacles, another 25% requiring cataract surgeries and then 5% of the population is requiring speciality surgeries or other ocular surgeries. This gave scope to the requirement for trained health workers.
- **Landscape studies and landlord engagement:** After the feasibility stage recommended the four locations, a deep dive into potential premises was conducted. This "somewhat tedious process" involved identifying, visiting and assessing eight to 10 premises in each particular block, with particular focus given to their accessibility (ensuring facilities like wash-rooms and toilets, ramps and railings are appropriate for people with disabilities, especially people who are blind or have low vision, using CBM guidelines). This process was often met with some reluctance on the part of landlords. IVCs were set up in rented buildings, not permanent spaces, and reliance on landlord support to meet minimum accessibility standards (ramps, wheelchair facilities) was required. Positive engagement with landlords was required to explain fully the concept of disability inclusion, and to achieve basic accessibility. Once the best locations and premises were determined, procurement orders were placed.

**Community worker training, including disability inclusion awareness training:**

The other key activity was around identifying the local Community Health Workers and IVC assistants and providing them with three months on-the-job training. This up-skilling meant they were able to run the IVCs and provide the community screening and basic eye care services.

Disability inclusion awareness training meant that IVC "para-medics" staff [i.e., vision technicians trained over two years to conduct refraction and comprehensive eye examinations] were better prepared to welcome people with disabilities to the centre, to sensitively examine patients with disabilities, and be sensitised to communicate well and counsel patients with disabilities for surgery and other procedures. It was felt that IVC staff continue today to display positive disability inclusive behaviours and practices.

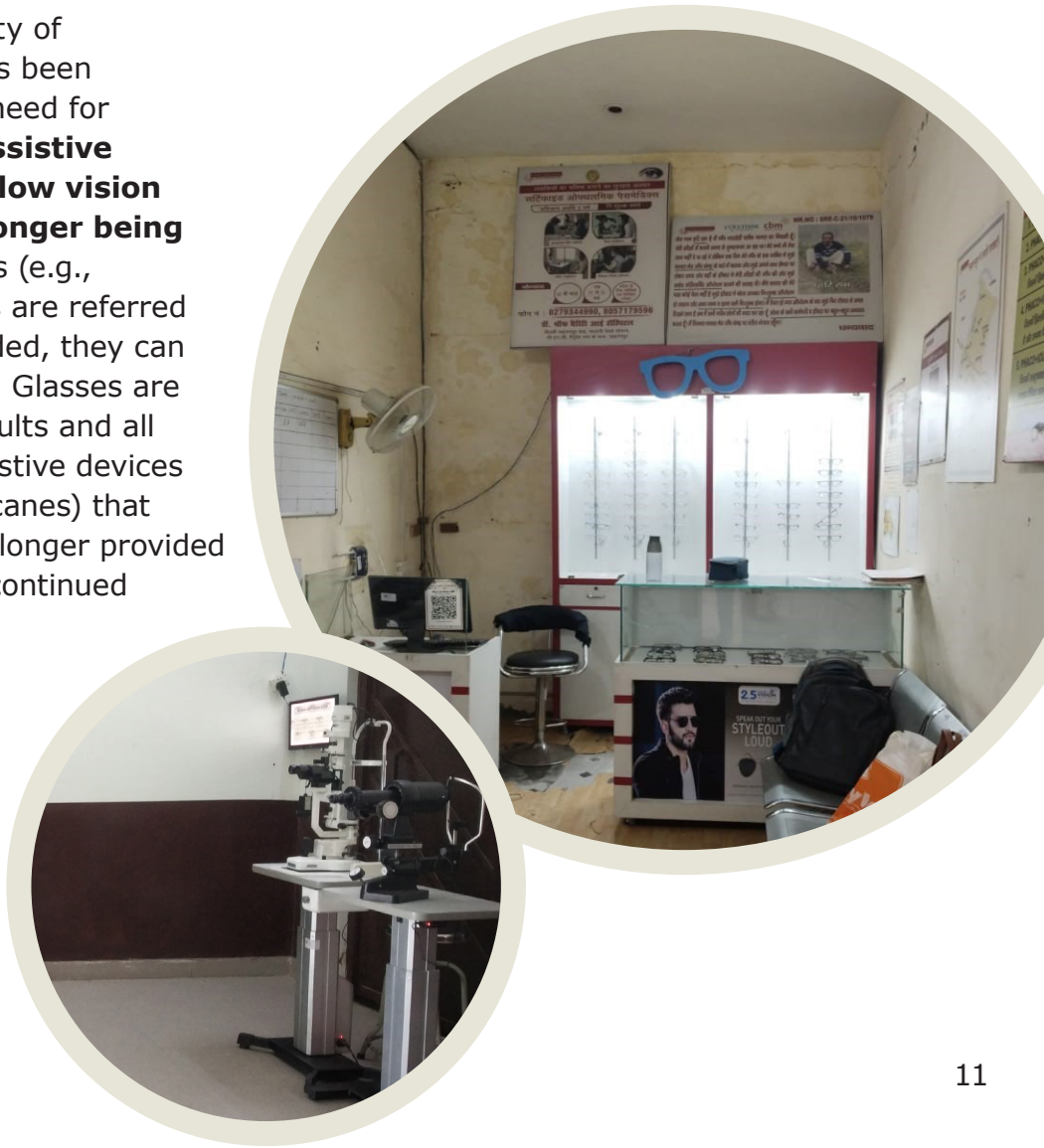
CBM India has subsequently worked on an additional project to develop and build disability inclusion into the para-medic curriculum. An inclusion module was developed and is integrated into para-medic training rolled out at both IVC and Dr Shroffs Charity Eye hospital levels.

## What has not been sustained at IVC level? And, what factors limited their sustainability?

**At the early stages of the pilot, the focus on people with disabilities attending the IVCs was too limited.** This partly reflected prioritisation on setting up the centres, and ensuring they were disability inclusive. However, initiatives including inclusion campaigns and door to door screening campaigns were developed to engage those who were not coming into the IVC. Ultimately, people with disabilities accounted for only 1% of the Outpatients Department patients. This could have been due to poor data collection and/or, not including all people with disabilities in the count. [More on this in the community level sustainability section below].

**Data collection on people with disabilities accessing the IVCs has not been kept up.** While regular data collection related to IVC services is still well maintained (i.e., number of people attending the centre, being screened, accessing glasses, being referred), data collected on disability has been dropped. This change happened within the last year or so during the process of shifting over to a new data management software. The hospital MIS did not include disability indicators, and when this software was rolled out to the IVC level, good practices around disability data collection were dropped. Overall, the upgrade has brought benefits – good quality data, online dashboard for easier monitoring and management. However, it is void of data related to disability. The focus group discussion for this paper, with key informants from both IVC and hospital levels, enabled staff to recognise that this data had been dropped, and a positive outcome of the discussion was a renewed commitment to trying to bring this focus back in.

While the physical accessibility of infrastructure at the IVCs has been maintained – or has had no need for maintenance (i.e., ramps), **assistive technologies, beyond the low vision aids and glasses, are no longer being provided.** For low vision aids (e.g., magnifying glasses), patients are referred to the hospital where, if needed, they can be given free optical devices. Glasses are provided for free to many adults and all children. However, other assistive devices (i.e., wheelchairs, crutches, canes) that were part of the pilot are no longer provided at the IVCs due to a lack of continued financial support. IVC staff suggested that people are now referred elsewhere for assistive technology.



Right: Photos showing the inside an IVC.

# Dr Shroff's Charity Eye Hospital level

## Who was involved and what was the approach?

The pilot was a new approach for CBM's partner hospital, and although Vision Centres were a known model in India, Dr. Shroff's Charity Eye Hospital was unfamiliar with how to set up community based Vision Centres, let alone IVCs. To support Dr. Shroff's Charity Eye Hospital in this process, a two-step approach was developed.

**The first step was to conduct feasibility studies** mentioned above, to identify gaps, and better understand the local population eye care needs. Using this information, Dr Shroff's Charity Eye Hospital was able to conceptualise the right structures – staffing levels, operating protocols – that needed to be put in place.

**The second step was to initiate community engagement to drive community health seeking behaviours.** Care was taken to customise the IVCs and the services to meet local needs. Even the technology that was used was customised (e.g., electronic medical records relevant at primary level, and tele-ophthalmology consultations for connecting with specialists).

Resources were then transferred from Dr Shroff's Charity Eye Hospital to the four IVCs according to their progress against both these steps. Sustainability considerations were then central to the model's design, as discussed above: project sustainability, IVC services sustainability (demand for services), and financial sustainability.

## What has been sustained at hospital level?

The strong working relationships between Dr Shroff's Charity Eye Hospital and its community based IVCs, established through the pilot, have been successfully maintained and replicated. Evidence of the sustained strength of these relationships is seen through the following:

- **Referrals from IVCs:** In Saharanpur, today, almost 75-80% of surgeries performed at Dr Shroff's Charity Eye Hospital are referred through a network that now includes 15 IVCs. The original four IVCs remain active in referrals.
- **Expanded MIS:** The new hospital management information system has been built out into a Vision Centre Management Software (VCMS), which enables – through dashboard updates – better management communications and support between Dr. Shroff's Charity Eye Hospital and IVC levels.
- **Inclusive financing model remains in place:** A high proportion of patients that are referred to the hospital for eye surgery today, from the IVCs, are still accessing this surgery for free. Hospital staff estimated that around 40% to 50% of current IVC referrals are accessing free surgery (compared to around 60% at the end of the project).

## What has not been sustained? And, what factors limited their sustainability?

**The old hospital building in Saharanpur was rented and accessibility modifications were not permitted.** Despite efforts to add wheelchair ramps and other accessible features, ultimately this was not possible because they were not permitted to modify the building. However, discussions around accessibility during the pilot led to these considerations being incorporated into the design of the new hospital building. Construction work temporarily disrupted eye services, limiting cataract surgeries. Now completed, the new hospital has improved tertiary eye care and better access, with internal and external ramps. What was a limitation during the pilot has been addressed in the long term.

**Training hospital staff in disability awareness and inclusion is important, but training alone was not enough to sustain change in attitudes and behaviours.** The pilot prioritised training staff at IVC level, however it was soon recognised that people being referred to the hospital level were not being met by similarly sensitised staff. Some sensitisation events were held with hospital staff during the pilot, achieving some general awareness and an appreciation of the need for accessible building designs. However, changing behaviours and attitudes is not linear and requires longer term engagement. Respondents agreed that while the training provided at the hospital level was impactful at the time, they also expressed concern that disability awareness had declined over time. This was linked to low numbers of interactions with patients with disabilities (while hospital staff are doing high volume surgeries, they only see a small number of patients with disabilities). The sort of mindset required was therefore difficult to maintain after the end of the pilot.

Subsequently, the project team now organises a three-day residential training programme in Delhi for hospital staff, which was rolled out after the pilot ended. This reaches around 500 para-medics every year, training them on disability inclusion. However, informants felt that to achieve a fully disability sensitised staff, more time, energy, and potentially a dedicated workforce was required for follow up. They also felt that this (the dedication of additional time and energy) runs counter to expectations within hospital eye care environments which focuses on hitting surgery targets related to patient numbers and surgical outcomes.

Staff from Dr Shroff's Charity Eye Hospital explained that supporting people with disabilities was out of their comfort zone, but that the pilot project had brought them greater awareness of this and the wider referral options available for patients with disabilities:

> **"We tend to be very much an eye care focused organisation and sometimes we stay in that sort of vertical a bit too tightly... [Now] we know where to go to, where to send the patients to if required and what is being done in the government and what sort of support can be given in the government."**
>
> *- Staff member from Dr Shroff's Charity Eye Hospital.*

**A new hospital management information system (MIS) has undone pilot work to gather disability data.** The new MIS was taken from a reputable, external Indian Information Technology organisation and was intended to improved hospital management system. However, the practice of collecting disability data which was implemented during the pilot project, has not been sustained and the hospital team only realised this during our discussions for this case study. This, however, led a senior manager to revisit discussions with the MIS developer to see if they could retrofit the information system to include disability data again in patient data.

# Wider community level

## Who was involved and what was the approach?

Extensive community level mobilisation was needed to identify and support frontline workers for the IVCs and help them mobilise patients. CBM India provided disability awareness and inclusion training, along with orientation on the IVC's purpose. Frontline workers also visited the IVC sites and hospital to better understand primary, secondary and tertiary level eye services. The goal was to integrate them into a wider team and delivery services, help them understand service access, and build their confidence working with patients at the community level. Frontline workers included Community Health Workers, Vision Centre assistants, and Technicians.

A high level of community engagement was crucial in mobilising health seeking behaviours and generating foot traffic to the IVCs. This was supplemented by door-to-door screenings within seven kilometres of the centres and school-based screenings to identify cases early within communities. Early identification and treatment are important dimensions in improving the quality of life for children and their cognitive development, as it enables them to better focus on learning at school and reduces avoidable blindness.

The initial ambition of the pilot IVCs was that they would achieve break even status within two years. Today, IVCs report average walk-ins of close to 20 to 30 people per day, which is considered to be a very good achievement, and (as reported in the IVC section above) has enabled them to achieve financial sustainability.

## What has sustained at the community level?

**Frontline IVC workers were empowered through their new community roles.** The pilot project targeted 25 young women (aged 21-23), that were living in situations of poverty to become frontline workers at community level. The Programme Manager from Dr Shroffs Hospital visited the four locations to identify and train these women, supporting them over two years to build their confidence in their roles and establish the IVCs and service delivery model.

**Purposely employing young women led to some positive community changes,** as women in these communities typically did not pursue higher education. This reflects the general expectation that women will marry, move into their husband's house, and start a family, which undermines the perceived value of additional investments in girls. Informants also talked about how investing in women was often not allowed by villagers. However, through the pilot, young women were able to access higher-level, continued training. This was achieved through extensive sensitisation, where the project team facilitated regular discussions with parents and community members, taking them through the hospitals, showing them the facilities, and facilitating conversations with existing hospital staff. The selected young women participated in the training, completing a two-year course to become vision technicians and centre managers. The community now view these young women as key community stakeholders.

**"The best part is that we identified those young women to be given the skills development training programs and support. After that, they have joined as a vision technician, community mobiliser and the Vision Centre assistant."**

*- IVC Portfolio Manager, Dr Shroff Hospital.*

## Factors promoting sustainability at the wider community level:

The frontline workers employed during the pilot are still working as community-based hospital staff, now employed by the hospital. They report **satisfaction with their pay and being happy in their work and to serve in their communities for longer.** The IVC Portfolio manager strongly linked retention of the IVC staff to the **skills development opportunities** they were provided, which the hospital has maintained through continuous professional development opportunities.

**Wider engagement with India's government Community Health Workers** (namely Accredited Social Health Activist (ASHAS) and Anganwadi workers) was also key. These workers - community nurses, midwives and pre-school teachers - were engaged to act like social activists for health, visiting communities to increase awareness. There was approximately one Community Health Worker working per 1,000 people, and the pilot aimed to ensure that all of them in the four IVC areas were aware of and were able to refer patients, or indeed themselves, to the IVC services and facilities. These frontline Community Health Workers were essential in raising awareness of eye diseases and addressing misinformation. Prior to the pilot, communities were not aware of the services and functions of the IVCs and eye hospitals. Cultural myths surrounded eye disease and preference tended towards use of traditional healing practices. Community awareness was therefore important and needed to be reinforced.

**"I was asking very simple basic questions to community members. 'If you have got red eyes, what you will do?' Village people usually say they will do the traditional healing method... they will use some herbs in Ghee and apply it under various traditional ways of healing. This kind of cultural myth was there."**

*-IVC Portfolio Manager, Dr Shroff Hospital.*

**Community awareness was crucial for identifying and referring individuals to eye health services.** People knew who in their families and communities had vision impairments and required care. During community meetings organised by the hospital partner, health workers asked people whether they, their family members or their neighbours had any eye conditions and provided referral slips to the IVCs. These meetings helped unpack current practices and understandings around eye health and have continued even after the pilot ended.

**Frontline community engagement boosted foot traffic to IVCs and access to services. Community awareness became self-generating as awareness of the IVCs developed.** During the design phase, Dr Shroff's Charity Eye Hospital's IVC portfolio manager actively visited villages to address barriers to eye health-seeking behaviours essential for the IVCs' success. He travelled "hamlet to hamlet, household to household" to raise awareness. Once the prevalent eye conditions and access barriers were understood, services could be designed to meet community needs. For example, by identifying how many people with disabilities lived in the each of the four locations, transport to the Vision Centres was arranged or primary eye care provided at their homes ("doorstep services").

**"With this basic information we created awareness, and nowadays we are very proud to say that the people are coming to the Vision Centres and accessing eye care services in their communities."**

*- IVC Portfolio Manager, Dr Shroff Hospital.*

## What factors limited their sustainability?

**Mobilising community members with disabilities to IVC remained a challenge:** Community Healthcare Workers were instrumental in helping reach people with disabilities, either at their homes or by helping to transport them to the IVCs using local available transportation options (i.e., motorbikes, "autos" or electric rickshaws). However, despite this effort, challenges remained. Firstly, people with limited mobility were reluctant to travel as it was not physically easy for them. Secondly, in practice, it proved quite difficult to mobilise frontline health workers who were busy working on government projects. It was hard for them to give enough time to this, although the provision of training and orientation somewhat helped to overcome this blockage. Thirdly, trainees got married and/or moved on to other locations. The project trained and retrained many workers and to some degree this helped to overcome the challenge to replace people when they moved on.

Above: a ramp enables patients using wheelchairs to access the IVC.

# Government level

## Who was involved and what was the approach?

**Government engagement was important for ensuring success of IVCs.** The IVC project built around relevant, established government health systems, notably working with the Community Health Workers, making links into referral pathways, and developing a multi-stakeholder approach.

## What has sustained at government level?

**IVCs are now integrated into the formal government health system** in two States (in a Primary Health Centre in Karnataka and in a Community Health Centre in Haryana). Being integrated means they are now part of the formal primary care structure, alongside driving referrals to secondary services.

Government used to show comparatively less interest in eye health compared to other health concerns. Now however, **eye care services are included in the State government strategy, and a bilateral agreement (MoU) has been signed between the government and CBM India to continue the work.** To address the growing demand for eye care services, numerous charity/NGO hospitals have been established, working on the cross-subsidy model. The IVC model launched through this pilot by CBM at Dr. Shroff's Charity Eye Hospital has since been expanded to integrate primary eye care services into the government public health system.

While we currently lack data on relative budgets or budget increases, the efforts invested in this model are yielding significant impact. **The model has proven successful and holds great potential for scaling up.** CBM India hopes that in the coming years, it will be incorporated into state government health strategies. In Karnataka, discussions are already underway to recruit Ophthalmic Technicians at the primary care level.

## What factors promoted sustainability at government level?

Initially, CBM India faced some push back from government regarding the need for local eye services and the choice of IVC locations. This required some **strategising to help improve engagement during the project.** Over time, as IVC services and referral pathways were successfully established and their positive impact became visible, government support increased. Now, CBM India report no complications or problems when they attend or meet with the government departments.

## What factors limited government level sustainability?

**The project helped further Dr Shroff's Charity Eye Hospital's relationship with government, but informants felt that this was not fully leveraged.** Continuous engagement might have enabled more activities at community level, such as school screening and community level screenings. Over time, a more enabling environment has opened up with the State Government in Delhi. However, in Saharanpur, collaboration during the project period was limited and interactions occurred where there was direct overlap with government schemes. For example, aligning with the Ayushman Bharat (i.e., the national public health insurance scheme), as it was key to covering costs of eye surgeries. Dr Shroff's Charity Eye Hospital has become a leader in terms of the number of eye surgeries done under that scheme, but it was felt that collaboration remained a relatively small part of the whole picture.

# CBM India Trust level

## Who was involved and what was the approach?

CBM India's own learning outcomes were a significant impact of the pilot project. The four IVCs launched in the pilot led not only to considerable expansion of the model, replicated now in government hospitals, but also for CBM India itself. Approximately 200 IVCs are now managed by CBM India as part of what is now a large-scale project in different parts of the country[6]. Learning and practice feedback loops have significantly enhanced CBM India capacity for this delivery.

> **"The original funding was essentially a pilot project, which has extended into multiple projects since the [UK funded] pilot ended. There are now close to 200 Vision Centres. From pilot to now, our staff have become experts. CBM India has received funding of 3 years to establish new Vision Centres and we are working on a model where, by end of that window, they should be self-sustaining."**
>
> *- Director of Programmes, CBM India Trust.*

CBM India learned through the pilot with Dr Shroff's eye hospital what was involved to nurture emergent IVCs so that they could become independent centres (i.e., they developed a good understanding of the technical expertise and infrastructure needed, human resource, training, financing model, etc.). CBM India added a new evaluation level - a business plan - for sustainability. The business planning process supports IVCs to become viable, long-term independent centres, which, not only provide quality eye services, but also balance pay-for service to cross-fund services for people on lower incomes.

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6 Close to 130 vision centres are directly managed by CBM India and rest are managed via hospital partners.

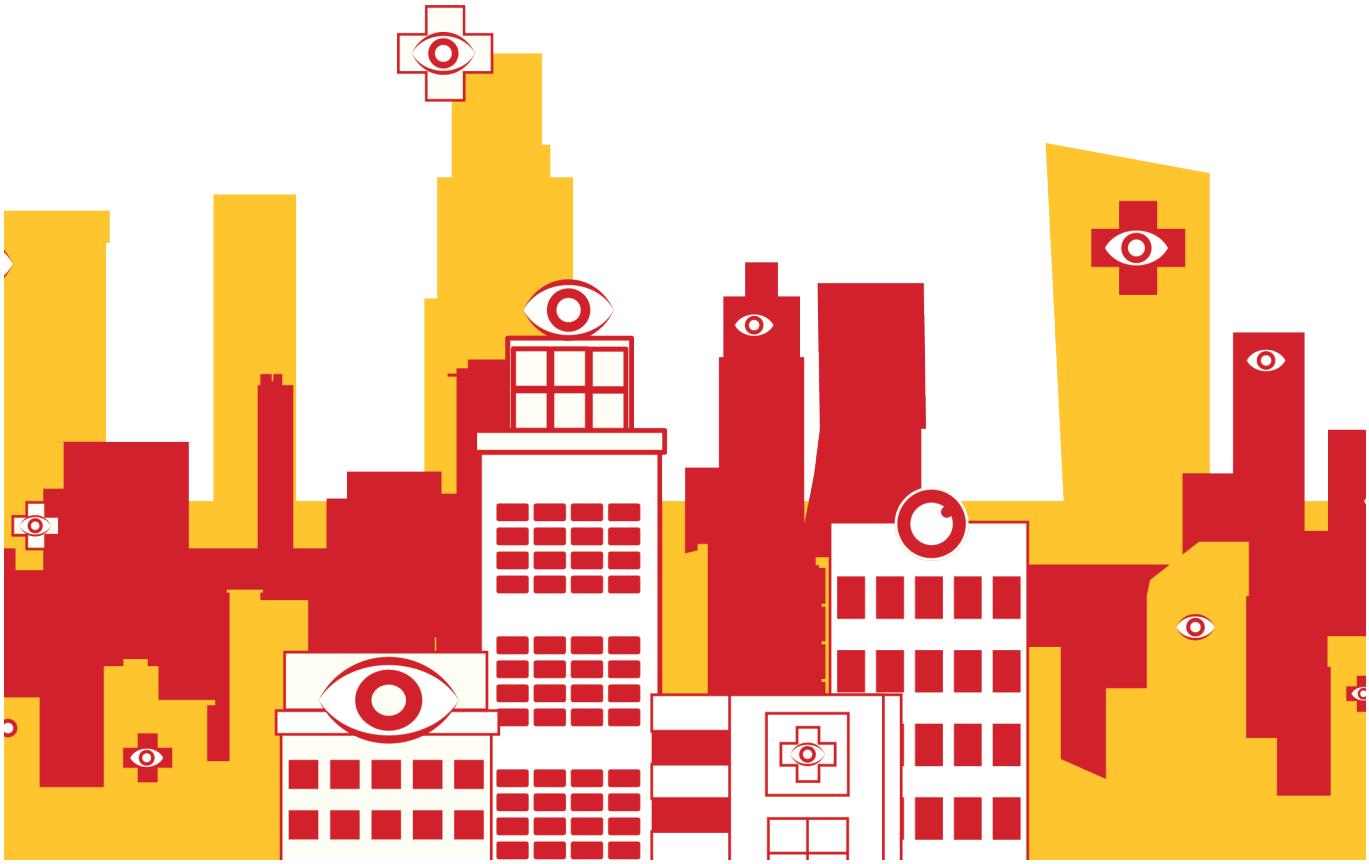
## What has sustained in CBM India? What factors promoted sustainability in CBM India?

**CBM India staff have become experts implementing the IVC model and have successfully secured additional 3-year funding to establish new IVCs.** These, they are confident, will become self-sustaining units by the end of the funded window. The basic lessons emerging from this successful model include having a long design phase, with lots of community level consultation, good knowledge of eye care and significant effort made to understand community level barriers.

**The initial IVC concept was developed by CBM partner, Dr Shroff's Charity Eye Hospital staff, with rich experience and expertise in eye care.** The conceptualisation and broad design of the project happened over a period of two years, before CBM was engaged and funding was provided.

**Sustainability and an exit plan were important aspects of the funded design.** An exit plan was part of the original funding requirement, so a strong sustainability lens was built in from the beginning. A sustainability matrix was designed covering programme sustainability, financial sustainability and environmental sustainability.

**The project was managed with clear benchmarks and targets.** Programme targets related to the numbers of patients/people receiving spectacles advice, spectacles for free or for sale, cataract advice, or referred for surgery were keenly monitored. "Financial sustainability" related to the ratios of 'free' to 'paid-for' surgeries and was also monitored. "Environmental sustainability" was linked to inclusion criteria, to ensure that communities could access services no matter whether they could pay or not. The cross-subsidy model for speciality surgeries also was carefully conceived of, with baseline studies helping to set the 'conversion rates' for free and paid for services. All the pilot IVCs successfully reached patient targets, meaning that they remained sustainable even after the funding ended.



# Factors in sustainability

## Factors that increased sustainability:

Key lessons emerging from the successful IVC model include having a long design phase, extensive community consultation, strong eye care knowledge and significant focus on understanding community level barriers.

Enabling factors for sustainability identified by CBM and Dr Shroff's Charity Eye Hospital staff included:

- **Effective human resources:** significant effort was made to recruit and train personnel to run the IVCs, with centre staff referred to as "the magic factors for sustainability".
- **Community engagement:** this was considered most important, with specific interventions designed to increase engagement.
- **Stakeholder engagement:** engagement across the system was vital in generating buy-in and support for reinvigorating the way basic eye care services were provided at the local level. This included focusing on leveraging technologies.
- **Quality assurance:** this focused on ensuring high standards for treatment and protocols/standard operating procedures. Performance management was set and tracked using indicators like Ophthalmic Outpatient Department surgeries, advice rates, surgical rates and outcomes, trend line analysis and various analysis of the IVCs. Additionally, value-added services like blood pressure, sugar, syringing, fundus examination, glaucoma examinations and corneal examinations were also tracked.
- **Value-added services increase visibility of IVCs:** value-added services were considered important dimensions to maintain the visibility of the IVCs. Informants felt that the IVCs would not be sustainable unless it is seen as an important community level basic health provider. The addition of these services increased the demand for services from the IVCs.

## Factors that inhibited sustainability:

Although it is the inclusion dimensions that differentiated the CBM pilot from the wider Vision Centres approach in India, it is also this aspect that has proven hardest to sustain. Factors that undermined sustainability or challenged the success of the pilot project's long-term impacts, as identified by CBM and Dr Shroff's Charity Eye Hospital staff included:

- **Inclusion of patients with disabilities:** disability inclusion was an integral part of the community engagement design and IVCs were themselves made accessible. However, it proved difficult to reach people with disabilities as transportation to the IVC remained a barrier, despite support being put in place, including home visits. Mobility aids and other assistive technologies (beyond glasses) provided during the pilot have not been sustained – as this was not a service that was built into the IVC financial sustainability/business plan, and ongoing funding was not secured.
- **Disability inclusion awareness among staff:** training was provided to staff and CBM India has supported an ongoing training model for hospital staff. However, due to low numbers of people with disabilities using the eye services at IVC level, alongside a prevailing culture focused around delivering high-volume surgeries at the hospital level, disability inclusion awareness has dropped off.
- **Disability data collection:** a performance indicator for the pilot IVCs was the number of people with disabilities accessing the IVCs. However, this data ceased to be collected over time, and with the introduction of a new health MIS, it was dropped completely. The discussions with hospital staff, resulting from this enquiry, has motivated them to take another look at this dimension of the MIS to assess how it might be reintroduced.

# Sustainability Checklist: IVCs

This list is put together by the IVC project manager at CBM India Trust. It represents a useful checklist for promoting and co-designing Inclusive Vision Centres. As with any checklist, such a tool would need to form the basis for discussion, from which to ensure all relevant components are included and contextualised to the new location.

**Effective human resources (three staff model - Vision Technicians, Community Health Workers and Vision Centre Assistant).**

- □ Skilled human resource
- □ Training and capacity building
- □ Salary package and incentives
- □ Refresher training

**Community engagement**

- □ Door to door screening
- □ Comprehensive camp
- □ Brand ambassador concept
- □ Creating awareness
- □ IEC promotions
- □ Disability inclusion
- □ Sensitisation programme

**Quality assurance**

- □ Management Information Systems
- □ Monthly review meeting
- □ Data management
- □ SQL Report
- □ Case stories
- □ Patient satisfied
- □ Brand ambassador

**Leveraging Technology**

- □ VCMIS
- □ Tele-consultation
- □ Digitalisation
- □ Standardisation of eye care equipment

**Stakeholder engagement**

- □ FLWs meeting
- □ Health care providers
- □ School teachers
- □ Community volunteers
- □ Government stakeholders
- □ Patient identification
- □ Strengthening the referral pathways

**Performance management / Incentives to IVCs team**

- □ OPD
- □ Optical advised
- □ Optical conversion
- □ Surgery advised
- □ Surgery conversion
- □ Free surgeries
- □ Paying
- □ Women access in IVCs
- □ Person with disabilities access in IVCs

# Conclusion

The pilot initiative showcased a well-designed and impactful approach to delivering accessible and quality eye care services at the community level, significantly improving the lives of those whose eyesight was restored. The success was rooted in meticulous planning and execution, but it also highlighted areas for improvement, particularly in disability-inclusive practices. While the model has since been replicated and expanded through the development of nearly 200 IVCs, the need for continuous improvement remains clear.

Strengthening disability awareness and accessibility, both at the IVCs and in partner hospitals, is essential to ensure seamless experiences for all patients, especially those with disabilities. This includes addressing gaps in accessible transportation, hospital infrastructure, and maintaining consistent staff training on disability inclusion.

Looking ahead, CBM India envisions a more sustainable future for its initiatives. The incorporation of environmental sustainability through fully digitised, paperless systems and the adoption of clean energy, such as solar power, demonstrates a forward-thinking approach that aligns with broader global goals. This "Green Vision Centre" concept not only enhances environmental stewardship but also reduces operational costs, contributing to the long-term viability of these centres.

By addressing these identified gaps and continuing to innovate, CBM India can ensure that the IVC model remains a benchmark for inclusive, accessible, and sustainable community eye care services.

## Acknowledgement

Interviews were conducted and written up by Ursula Grant, CBM UK, with thanks to CBM India Trust, notably Mr Shiva Mohan for organising the interviews, and Mr Madhavan Pillai for reviewing the draft and correcting errors. Thanks are extended to Mr. Sathish Nagappan for sharing his story and significant contributions to the IVC pilot project during his tenure at Dr Shroff's Charity Eye Hospital. We also thank Ms. Fairlene Soji (Director Impact and Knowledge Management), Mr. Ravi Ranganathan (Director Programmes, CBM India Trust), and Dr. Shalinder Sabherwall (Dr Shroff's Eye Charity Hospital) for their support and contributions to the study. Additional thanks to Jaynelle Lording (CBM Australia) for her editorial review. Our collective gratitude goes to all the informants from the pilot project who generously shared their time and insights on the sustained success of the IVC India project.

For further information on the vision centre model in India:

- Primary eye care in India – The Vision Centre model: Rohit C Khanna, Shalinder Sabherwal, Asim Sil, Mohammed Gowth, Kuldeep Dole, Subeesh Kuyyadiyil, Heidi Chase- Indian Journal of Ophthalmology, Primary eye care in India – The vision center model - PMC.

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2025