Inclusive Eye Health Report 2024

cbm
christian blind mission

Cover photograph: Following CBM supported surgery for unilateral cataract, 6-year-old Clever of Malawi now has a future full of hope and opportunities as his sight is fully restored. © CBM Daniel
Above: Dr. Babar Qureshi, CBM Director of Inclusive Health Initiative examines a student, Sheila, during a visit to one of the VIP sites in Kenya. Photo Credit: © CBM

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Left: 7 year old Osée with his mother at Saint Joseph hospital after a successful surgery of bilateral cataract.

Far left: Peek technology in use in a school screening in Kenya.

Above: 14 year old Siraj during a screening at SIOVS Peek Project, supported by CBM. A pair of prescription glasses addressed his vision problems, allowing him to see clearly without straining his eyes.

Foreword

Reflecting on the past year, I am delighted to present CBM's 2024 Inclusive Eye Health Annual Report.

This year marked a period of remarkable achievements as we intensified our efforts to strengthen national eye health systems and improve access to inclusive, comprehensive eye care services, fully integrated within national health systems and policies. In 2023, we successfully implemented **132 projects** in partnership with **102 Partners** across **30 countries**, making significant strides toward a world where quality eye care is accessible to all.

This report showcases CBM's commitment to advancing child eye health, resonating with this year's World Sight Day theme, under the 'Love Your Eyes' campaign, coordinated by the International Agency for the Prevention of Blindness (IAPB). World Sight Day 2024 emphasises the critical need to prioritise the eye health of children worldwide. With an estimated 450 million children globally requiring treatment for a sight condition, we are proud to align our efforts with this vital cause, ensuring that every child has the chance to receive proper eye care and to safeguard their future.

In this report, we highlight key examples of our work in child eye health. Our Retinoblastoma Project in Uganda is dedicated to improving the quality of life for children with retinoblastoma in South-Western Uganda and serves neighbouring countries, including Kenya, Tanzania, South Sudan, and Congo. In Guatemala, our partnership with Fundación Guatemalteca para Niños con Sordoceguera Alex (FUNDAL) and Unidad Nacional de Oftalmología (UNO) focuses on establishing comprehensive low vision services across five districts. Additionally, through collaboration with UNO, we support Retinopathy of Prematurity initiatives, leveraging tele-ophthalmology to enhance diagnosis, treatment, and adherence to care in remote areas. In Kenya, the Vision Impact Project (VIP) since its launch in 2021 improves access to eye care services for children in seven counties through community and school screening programmes.

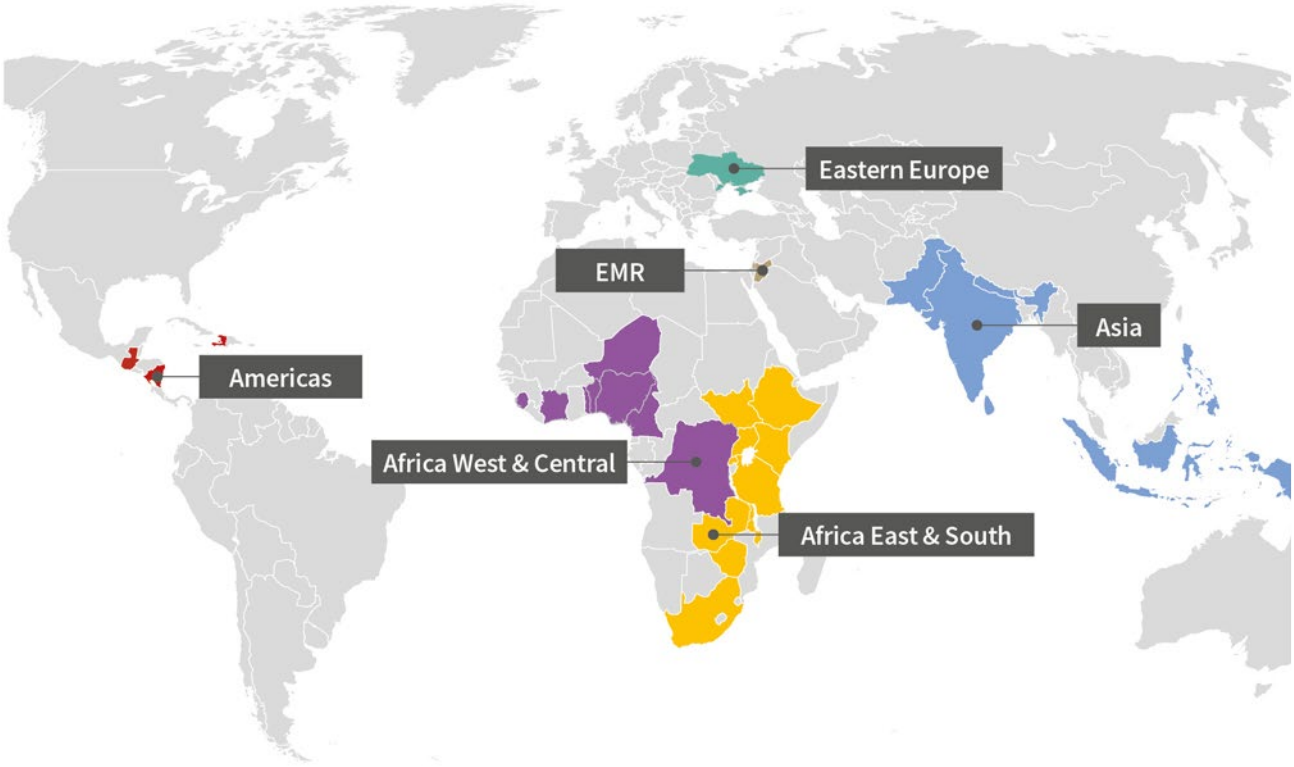
To ensure continued service delivery in low resource settings, CBM remains committed to supporting the expansion of Human resources for Eye Health. This is achieved through scholarship awards to doctors, to facilitate post graduate degree studies in Ophthalmology, and specialty trainings, and skills enhancement opportunities provided to various cadres of eye health personnel in our countries of operation.

Finally, as an Initiative, we are continuously seeking ways to improve our offering. In this regard, we are reviewing our strategy to ensure that our eye health initiatives align with our vision to create an inclusive world in which no one experiences unnecessary or preventable sight loss.

I would like to extend my appreciation to our donors and partners for the support they continue to offer us.

Dr. Babar Qureshi
Director of CBM Inclusive Health Initiative

Our 2023 Inclusive Eye Health Programmes Footprint



Our 2023 reach in numbers

8.9 million
Persons reached

7.6 million
Consultations

2.0 million
Refractions

700 thousand
Assistive devices

351 thousand
Procedures

252 thousand
Cataract surgeries

2023 Inclusive Eye Health Programme Portfolio

Region	Country	Total Projects	Total Partners	People Reached	Awareness Campaigns	Consultations	Visual Assistive Devices	Cataract Surgery	Diabetic Retinopathy related Procedures	Glaucoma Procedures	Retinopathy of Prematurity Procedures	Trainings
Africa East & South (AFES)	Kenya	11	8	1,869,282		✓	✓	✓				✓
	Ethiopia	14	12	445,345	✓	✓	✓	✓		✓		✓
	Zambia	5	4	416,297	✓	✓	✓	✓	✓			✓
	Uganda	9	5	187,741	✓	✓	✓	✓	✓	✓	✓	✓
	Tanzania	7	6	132,190	✓	✓	✓	✓		✓		✓
	Zimbabwe	3	2	55,048		✓	✓	✓				✓
	S. Sudan	5	3	41,745	✓	✓	✓	✓				✓
	Rwanda	6	2	24,359	✓	✓	✓	✓	✓	✓	✓	✓
	Malawi	1	1	4,784		✓	✓	✓		✓	✓	✓
	South Africa	1	1	1,550		✓		✓		✓		✓
Africa West & Central (AFWC)	D.R. Congo	8	6	224,900	✓	✓	✓	✓				✓
	Togo	2	2	198,318		✓	✓	✓				✓
	Nigeria	2	2	44,405		✓	✓	✓		✓		✓
	Cameroon	5	3	41,741		✓	✓	✓	✓			✓
	Sierra Leone	1	1	36,924	✓	✓	✓	✓				✓
	Benin	1	1	27,027	✓	✓		✓				✓
	Niger	1	1	1,433		✓		✓				
	Ivory Coast	1		<500		✓	✓					
Americas	Haiti	1	1	25,000		✓		✓				✓
	Nicaragua	2	2	10,500		✓		✓				✓
	Guatemala	2	2	735	✓		✓				✓	✓
Asia	India	29	23	3,157,465	✓		✓	✓	✓	✓	✓	✓
	Pakistan	7	6	1,526,691	✓		✓	✓				✓
	Nepal	2	1	220,219		✓		✓				
	Sri Lanka	1	1	172,991		✓	✓		✓			✓
	Philippines	1	1	56,354		✓	✓	✓				
	Indonesia	1	1	10,947		✓	✓	✓				
EMR	Palestinian Territories	1	1	2,280		✓						
	Jordan	1		<500	✓							✓
Eastern Europe	Ukraine	1		<500								✓

CBM Transforming Lives through Child Eye Health Programmes

Joy Koech, CBM's Head of Inclusive Health Programmes explains CBM's approach to Child Eye Health.

Childhood is a critical period for visual development. Early detection and treatment of eye conditions can significantly enhance a child's quality of life, educational opportunities, and overall well-being. Christian Blind Mission (CBM) is at the forefront of global efforts to prevent and treat childhood blindness and visual impairment through its comprehensive child eye health programmes.

The scope of the problem

According to the World Health Organization (WHO), approximately 19 million children worldwide are visually impaired. Of these, 12 million suffer from conditions that could be easily corrected, such as refractive errors, while an additional 1.4 million are irreversibly blind. Globally, children are affected by a range of eye diseases and conditions, some of which lead to permanent visual impairment in childhood, or later in life. Many of these conditions are preventable or treatable.

In the poorest communities in the world, up to 50% of children aged 0 to 10 years have active trachoma, caused by Chlamydial infection. 1 to 2% of preschool children have strabismus, which can lead to unilateral visual loss if not detected and treated early. Cataract also affects children and early detection and surgical management by paediatric teams leads to improved visual functioning. Refractive errors also occur in children in all regions of the world.

Above: Joy Koech (in specs) and Eye Health Advisor, Dr. Kola (in blue shirt) engage in a discussion with a community health worker during a field visit to a School screening activity in Meru County, Kenya.

> "In the poorest communities in the world, up to 50% of children aged 0 to 10 years have active trachoma, caused by Chlamydial infection."

CBM's approach to Child Eye Health programmes

To respond to the range of child eye diseases and conditions, CBM has implemented 35 Child Eye Care programmes between 2015 and 2023. These programmes entail:

School-based programmes

Schools are ideal venues for screening large numbers of children. CBM's partners work with local education authorities to implement vision screening programmes in schools, ensuring that children receive timely eye exams and necessary corrective measures, such as provision of eyeglasses or referrals for further interventions at the appropriate levels of care.

Advocacy and policy development

CBM works with governments and international organisations to advocate for policies that support child eye health. This includes integrating eye health into national health plans and securing funding for eye care programmes. To demonstrate our commitment to the Global Eye Health, CBM is a member of the World Health Organization SPECS Initiative where we aim to ensure that everyone including children in need of spectacles have access to timely, affordable, quality and people centred refractive error services.

Specialised eye care services

For children identified with more complex eye conditions, CBM facilitates access to specialised eye care services. This includes providing surgeries for cataracts, corrective surgeries for congenital abnormalities, and treatment for eye diseases.

Community awareness and screening

In our countries of operation, we raise communities' awareness about common eye conditions and the importance of early detection. CBM conducts community-based screenings to identify children at risk and refer them for further evaluation and treatment.

Training and capacity building

CBM invests in the training of paediatric eye teams, local healthcare workers, teachers, and community volunteers to ensure the sustainability of eye health services. By building local capacity, CBM ensures that communities can continue to provide eye care services independently.

In 2023:

CBM reached over 2 million children with Eye Health Services

Challenges

While CBM has made significant strides in improving child eye health, challenges remain including limited resources for the expansion of child eye health services, geographic barriers where remote and underserved areas often lack access to eye care services and cultural beliefs with misconceptions about eye health preventing families from seeking timely care. To address these challenges, CBM continuously explores innovative solutions, such as mobile eye clinics and telemedicine, to reach more children in need.

CBM's child eye health programmes are a testament to the organisation's commitment to ending preventable childhood blindness and visual impairment. CBM seeks to ensure that children around the world have the opportunity to see, learn, and thrive. Investing in child eye health is an investment with a lifelong impact.

CBM's Approach to Low Vision Services for Children

Dr. Karin Van Dijk, CBM Global Advisor on Low Vision explains CBM's approach to low vision/ vision rehabilitation services for children.

If an infant or child seems to have vision problems, it is essential the child is seen at an eye health facility as soon as possible. If the child is then diagnosed with low vision, further care is needed.

Providing low vision care to babies, infants and children requires the cooperation and involvement of many different people, such as: the children, their family, their community, eye health professionals at all levels of service delivery and people involved in health, early childhood development and education at community and district level. In addition, local and regional level government officials responsible for eye care, education, and services for people with special needs are important to ensure continuous and sustainable services.

A comprehensive wholistic approach

CBM considers low vision, also referred to as vision rehabilitation services, as a vital part of comprehensive eye health delivery. It creates an opportunity to deliver quality, inclusive eye health services not only to people with low vision, but to all people with disabilities such as learning disabilities, hearing impairment or cerebral palsy.

Eye health staff providing low vision care in CBM supported programmes are trained to be creative and flexible, have access to a variety of assessment materials and often have more time to work with a client. Children with disabilities benefit from this, as busy outpatient and refraction departments often have limited time per client. Low vision care also creates the need to refer children for further support. This ideally leads to collaboration with, for example, early childhood and education programmes in the area, which in turn may increase early identification and referral to eye health services.

With CBM's support many eye health staff have received training in low vision both face-to-face and online. We are currently supporting the capacity building of national Trainers and Advisors in low vision of eight countries in Africa.

Decentralising low vision care

People tend to think that low vision care can only be implemented at a tertiary level hospital and preferably at a separate low vision clinic. However, low vision services can be provided at the district level. Currently, low vision services have been integrated in to 40% of CBM's supported eye health programmes, with the majority including both district and tertiary level services.

In a CBM supported eye health programme in Kenya, a child with vision problems who was ready to start school was identified and referred by a local community health worker. She received prescribed spectacles and a low power hand magnifier; and was trained in the use of these interventions. She started going to her local school where the teacher, supported by a visiting special teacher trained in low vision, checked and advised on the best sitting position in the classroom, demonstrated the correct use of spectacles and devices to learn to read and write, and helped integrate the girl to the classmates and caregivers.

In 2023:

8.9 million people accessed eye health services through our programmes

Addressing barriers to low vision services

Some of the challenges faced in provision of vision rehabilitation services include early identification of infants with disabilities and possible vision problems, ensuring government support for sustainability of the services, and access to affordable spectacles and optical low vision devices (including technology).

We are intentional to address the barriers through strategies such as:

Our vision rehabilitation services aim at increasing collaboration at community level to identify and refer infants and children needing vision care to the nearest or most appropriate eye health services, with emphasis on local government involvement.

At national level, we support advocacy by Organisations of People with Disabilities to push for the inclusion of spectacles and selected low vision devices in national health insurance schemes.

Above: 11 year old Athman uses CBM supported low vision devices for his studies.

In 2023:

We provided over 700,000 assistive devices

Highlighting collaboration between eye health programmes, community services and government policies

During an outreach visit by a CBM supported eye health-low vision service to primary schools with resource units for 'blind children' in one of the African countries, vision and eyes of all ten children in one of the units were examined and followed up. All the ten children were using Braille and had never had a thorough eye examination. It was found that three of the ten were irreversibly, blind, four children who were labelled blind needed and received cataract surgery in both eyes and were able to read printed text. The tenth child had Down Syndrome and reached normal vision levels after receiving prescribed spectacles.

Teachers and caregivers were sensitised on how to support the children in the use of vision aids. Through advocacy of an Organisation of Persons with Disabilities, teaching print instead of Braille was allowed by the government authorities. The child with Down Syndrome was enrolled in a community programme for children with disabilities and moved to a local school. This successful case study was used to advocate at national level for the rights of children with disabilities to receive early eye health examinations and other medical care.

"With CBM's support many eye health staff have received training in low vision both face-to-face and online. We are currently supporting the capacity building of national Trainers and Advisors in low vision of eight countries in Africa."

Bringing Hope to Children with Retinoblastoma in Uganda

Retinoblastoma is a rare type of eye cancer that typically develops in early childhood, usually before the age of five. It is commonly reported in many regions of Africa.

Early diagnosis and treatment are crucial to prevent the cancer from spreading and to preserve vision. Survival of children with cancer in resource-limited regions is very poor compared to better-resourced regions. Many children in Uganda present with advanced Retinoblastoma and curative treatment is not possible in this setting.

A nationwide study conducted by Cancer Research UK in Uganda found that 45% of the affected children died within the first three years and that on average 86 new cases were diagnosed annually. The study marked a significant advancement in the treatment of Retinoblastoma with the introduction of chemotherapy and cryotherapy in 2009. Although these therapies significantly improved treatment outcomes, the death rate remained high due to delays in seeking medical care. This then necessitated awareness campaigns among the communities, which led to an increase in the number of children seeking treatment at the Mission Hospital. The mortality rate has since reduced by 37% with approximately 130 children seeking treatment annually at the health facility. Chemotherapy has turned out to be a routine intervention in children with Retinoblastoma disease.

Above: Dr. Irari doing dilated funduscopy under anaesthesia on a patient with retinoblastoma. Dr. Irari is a beneficiary of the CBM scholarship programme. © CBM

CBM's intervention on Retinoblastoma

CBM has supported Ruharo Mission Hospital since 1984 and is currently implementing a 3-year CBM-funded project (January 2022-December 2024) that seeks to improve the quality of life for children with Retinoblastoma disease in South-western Uganda by providing comprehensive promotive, preventive, curative and rehabilitative eye care services to children diagnosed with the disease through:

- Providing retinoblastoma management services such as investigations, chemotherapy, surgeries, counselling, follow-up, and prostheses.
- Creating awareness about Retinoblastoma disease through various media such as radio, TV, and printed materials.
- Providing psychosocial counselling sessions to Parents/caretakers of children with Retinoblastoma.

Saving lives beyond borders

We are dedicated to treating retinoblastoma. The project serves not only Ugandan Retinoblastoma patients but also children from neighbouring countries like Kenya, Tanzania, South Sudan, and Congo. The treatment approach combines chemotherapy, laser therapy, cryotherapy (freezing tumours), and, when necessary, eye removal to save the life and vision of the child.

Meet Kusiima

Kusiima, a vibrant 17-year-old girl from Ibanda, Uganda, carries a story of endurance and hope. Diagnosed with retinoblastoma, at the tender age of 3, she was plunged into darkness. Thanks to the initiative of Ruharo Eye Centre in partnership with CBM, Kusiima's vision was preserved, and her dreams made possible.

Kusiima's story is an example of the importance of early diagnosis and access to proper treatment. Ruharo Eye Centre became Kusiima's place of refuge and treatment. Here, Kusiima's left eye was removed, she received the first two rounds of chemotherapy. Counselling sessions helped her, and her family navigate the emotional turmoil of the diagnosis. Thankfully, the cancer was completely eradicated!

Kusiima regularly visits Ruharo for follow up check-ups. However, her most recent visit to the hospital was a different one! She had successfully completed her primary leaving exams with a high first grade, earning her a coveted place at Rwansinga Secondary School and she visited Ruharo to pick up her high Secondary school books. Kusiima, the little girl who beat the odds of Retinoblastoma, now embarks on her journey in secondary school at 17 years of age. Her dream of becoming a doctor burns bright.

> "Kusiima, the little girl who beat the odds of Retinoblastoma, now embarks on her journey in secondary school at 17 years of age."

Since 2022:

2,277 children: 1,101 males and 1,176 females, have received retinoblastoma management services including investigations, chemotherapy, surgeries, counselling, follow-up, and prostheses

Left: Young Kusiima after surgery.

Strengthening Low Vision Services in Guatemala

In partnership with the Fundación Guatemalteca para Niños con Sordoceguera Alex (FUNDAL), renowned for its expertise in inclusive education, rehabilitation, and livelihoods for people with disabilities, and the Unidad Nacional de Oftalmología (UNO), known for its excellence in ophthalmic service delivery and training, CBM has facilitated the establishment and equipping of five comprehensive low vision rehabilitation centres in Guatemala City, Quetzaltenango, Huehuetenango, Sololá, and Chiquimula.

This project has enhanced the skills of low vision teams, including ophthalmologists, optometrists, and visual rehabilitators, and has strengthened the referral system for low vision patients. Additionally, it has raised awareness about low vision among eye health professionals and the public and is working towards integrating children with low vision into the mainstream education system.

The referral pathway

The low vision clinic at UNO is currently the first contact point for the identification and diagnosis of people with low vision who are then referred to one of the five rehabilitation centres, depending on which one is closest to their home. Rehabilitation aims at providing the tools and guidance to allow people with low vision to fully use their residual visual and to function in their day-to-day environment. It includes

Above: 12 year old Sofi has low vision and Cerebral Atrophy. Sofi is part of the pre-vocational programme at CBM partner Fundal's centre.
© CBM Sheikh

orientation and mobility, visual stimulation, literacy, use of optical aids, contrasts, and electronic support. This allows clients to have more autonomy, e.g. when moving around their homes, going to the bathroom, dressing, cooking, and conducting other domestic activities. It also reduces accidents and injuries because they have a better perception of their environment.

Integration into the community

Beneficiaries who received therapy have also become more actively integrated into their communities through social, employment, and educational activities. Workshops such as making soaps, chocolates, or food dishes, together with family members, contribute to these positive outcomes because families can develop activities that include the participation of people with low vision. They learn to make adjustments in their homes such as placing contrasts in containers when preparing recipes, placing visual guides on the floor and using large objects if they want to carry out recreational activities such as playing ball. Most importantly, a positive impact on the self-esteem and mental health of people with low vision has been observed. The psychosocial support provided during rehabilitation has helped many people to overcome emotional and psychological problems, especially in cases where people acquired low vision later in life through accidents or worsening eye conditions.

Students with low vision are supported to participate in mainstream schools. This is done by training teachers, providing recommendations to families, and accompanying the student with complementary services such as communication therapies, orientation, and mobility support. In addition, the project team worked with over eight hundred teachers in schools in the target departments to provide them with information about low vision and to support them in making adaptations to the learning environment and developing strategies allowing children with low vision to participate fully in class.

Further, the project organised workshops about low vision for organisations of people with disabilities (OPDs) as well as awareness campaigns for ophthalmologists and for the public through webinars and social media.

Sustaining the gains made

Services are now inter-linked through a uniform digital data management system, and the number of people accessing services is growing year on year whilst waiting times between diagnosis and receiving rehabilitation services are much reduced. The project's multidisciplinary approach guarantees that all client needs can be addressed. Patients are also made aware of how to take care of their residual vision and of the importance of attending regular eye check-ups.

Low vision is an area of eye care that is often neglected by the profession as it does not generate much profit. To address this challenge, the project is providing training for ophthalmology residents at UNO who receive a basic course on low vision as part of their ophthalmology postgraduate course. The first cohort of residents who were trained in low vision graduated in 2023 and have recently taken up positions throughout the country which means that in the coming years, we expect to see an increase in the numbers of low vision diagnosis and referrals, especially in areas outside of Guatemala City. It will also mean that patients no longer need to travel to Guatemala City for their initial diagnosis.

> "This project has enhanced the skills of low vision teams, including ophthalmologists, optometrists, and visual rehabilitators, and has strengthened the referral system for low vision patients.

In 2023:

5 comprehensive low vision rehabilitation centres in Guatemala established and equipped

Preventing Avoidable Blindness in Guatemala – Retinopathy of Prematurity Project

Retinopathy of Prematurity (ROP) is an eye condition that mainly affects pre-term babies who have not completed the growth of the retina at the time of birth. It occurs when the blood vessels in the retina do not develop properly.

ROP can lead to vision problems or even blindness if left untreated or if not treated in time. It is the leading cause (about 24%) of childhood blindness in Latin America. The treatment for retinopathy of prematurity consists of eliminating the growth of abnormal vessels inside the retina, which are responsible for causing the detachment of the retina and therefore blindness. Treatment may involve the use of indirect laser, which is applied to the retina through an indirect ophthalmoscope or injection of an anti-angiogenic drug (anti-VEGF therapy), which is applied inside the vitreous cavity and works by blocking the release of growth factors such as vascular endothelial growth factor, the main factor responsible for the growth of the vessels that cause retinal detachment.

Using tele-ophthalmology to offer ROP services in remote areas

CBM started supporting Retinopathy of Prematurity (ROP) work in Guatemala, in collaboration with our partner UNO – the Unidad Nacional de Oftalmología – in 2019. Guatemala has a total of forty-three government hospitals with neo-natal departments. Prior to our collaboration with UNO, nine of these already had ROP services in place, but these were mostly concentrated in the capital and its surroundings. Through the partnership with CBM, ROP services have now extended to a further twelve hospitals across the country. In seven of these hospitals, consultation is done via tele-ophthalmology, whereby hospital eye care technicians send pictures of a newborn's retina to the ophthalmologist at UNO who then makes the diagnosis. The other five hospitals have ophthalmologists who diagnose ROP. The use of tele-ophthalmology has facilitated and significantly improved levels of diagnosis, treatment, and adherence in more remote areas.

Towards a health systems strengthening approach

Neo-natal staff in all twelve hospitals trained in oxygen management, neonatal resuscitation guidelines, and optimal ventilatory strategies for premature babies to prevent severe cases of ROP.

UNO developed an online training course in 'Comprehensive Care of Premature Babies for ROP Blindness' for different types of health professionals ranging from nurses to general practitioners.

The hospital has integrated ROP into their training programme for residents and fellows in Paediatric Ophthalmotherapy who are trained in the diagnosis and treatment of ROP and supervised in their clinical evaluations.

Towards treatment adherence

The project has intensively worked with parents of premature babies whose economic circumstances often make it difficult to attend follow up appointments at the hospital. This is compounded by long distances they might have to travel as well as communication problems when they do not speak and/or cannot read and write Spanish.

Parents are given face to face talks as well as written information (translated into relevant Mayan languages). They also receive follow phone calls and/or text messages to ensure their adherence to screening appointments. UNO further published a YouTube video to encourage parents to attend their appointments; the video is played on screens in the hospitals' outpatient clinics.

The exploration of different channels and methods of communication with families, which has included the recruitment of nurses who are responsible for close follow up, is leading to greater understanding and adherence rates to screening and treatment appointments and in the last two years, screening numbers have more than doubled compared to numbers recorded during the preceding years.

Beyond vision, enhancing neonatal care

In addition to reducing the rates of avoidable childhood vision impairment and blindness in Guatemala, the project is significantly enhancing neonatal care, particularly for premature infants, leading to improved overall health outcomes and higher survival rates for newborns.

In 2023:

CBM supported 886 ROP procedures

A story of hope

On September 28th, 2022, at Huehuetenango Regional Hospital, Keily was born prematurely at 34 weeks, weighing just 1800 grams and in critical condition, requiring mechanical ventilation for breathing support. In the third week of life, an ophthalmologist diagnosed him with Retinopathy of Prematurity (ROP), and he received treatment with intravitreal Anti-VEGF injections while in the neonatal unit. By 40 weeks, Keily's retinal vascularisation had fully developed, and his retina had completely matured.

> "I am filled with happiness and gratitude for the comprehensive care my baby received at this hospital"
>
> **Keily's mother**

The hospital celebrated his remarkable health improvement, survival, and progress in a symbolic act of thanksgiving, marking his recovery and the success of the treatments administered.

Left: Keily during the thanksgiving celebration at the hospital.
Below: Keily at birth.

Field Trip to Guatemala and Nicaragua

Andrea Brandt von Lindau – CBM's Inclusive Eye Health Senior Programme Manager shares her impressions of a recent field visit to CBM's Eye Health Partners in Guatemala and Nicaragua

It was a great experience conducting a field visit to Guatemala together with the Director of the Inclusive Health Initiative, Dr. Babar. The field visit was aimed at meeting with CBM's partners to discuss the progress of the current projects and future needs.

I was impressed by our partner FUNDAL who provides education services for children with multiple disabilities including sensory disabilities and have a low vision rehabilitation room which was set up as part of the CBM supported project. FUNDAL also has a workshop where they use adaptive design to produce low-cost assistive devices for the children in their school, including wheelchairs.

When we arrived at FUNDAL, we were given a tour of the main building where they conduct their classes and low vision rehabilitation sessions while wearing blindfolds and earplugs to get a better understanding of the beneficiaries' experience including how the staff at FUNDAL communicate with them. After the tour, we discussed the experience. This was a very memorable experience for me that will inform my work as I support the design of future eye health programmes.

We had the opportunity to meet some adults with low vision who were participating in a livelihood session during the time of our visit. We met a lady who had learned to make chocolates which she sells in the markets or at special events and we were able to taste some of the pancakes which the group had made and decorated that day.

We also visited our partner UNO in Guatemala where we learned more about the CBM supported Retinopathy of Prematurity programme and how tele-ophthalmology is used for diagnosis of ROP in premature babies throughout the country; hospitals around the country send images of the babies' eyes to the ophthalmologist at UNO who makes the diagnosis and treatment plan, if any.

In Nicaragua, I was impressed by the extensive network of community volunteers who work with people in the communities and refer them to services. Some of them even attended our meeting with the Vice-Minister of Health – alongside several other project staff from the eye clinics we work with – and demonstrated how they do eye screenings in the community, which was great to see. It was remarkable to know that the within the Nicaraguan national health system, services are provided free of charge to patients.

While in Nicaragua, CBM's partner ASOPIECAD had organised a home visit to a 6-year-old girl, Carla who is part of the community programme. Carla is included in a pre-primary education program because of a great collaboration between the Inclusive Education program and the eye health program.

> "The visit was indeed an opportunity to experience the work of CBM's eye health partners in practice and interact with the beneficiaries of CBM's work. It was a great inspiration for my day-to-day work."

Top: CBM and UNO team during the visit. © CBM
Below: Carla during the home visit.

Vision Impact Project in Kenya

The Vision Impact Project (VIP) is a 4-year programme (Dec 2021 to Dec 2025) that aims to reduce the prevalence of avoidable blindness and prevention of visual impairment, and to strengthen the eye health system in seven target counties in Kenya. The project is implemented in partnership with 7 county governments and eye health partners.

Above: Zack Waweru, an Optometrist under Kajiado County VIP project conducting refraction during a school outreach at Moopei primary school. © OEU

VIP in numbers

2 eye health facilities constructed in Kajiado and Vihiga Counties

7 optical clinics established

42 healthcare workers enrolled into Medical Training College

1,442 healthcare workers trained on primary eye care and on use of peek technology

968 healthcare workers trained on disability Inclusive development

7 functional County Eye Health Technical Working Groups established

88 primary and Secondary facilities supported with medicine and consumables

2.8 million people screened out of which 802,980 are from schools

881,542 people identified with eye conditions out of which **178,413** are children

576,111 received treatment at primary level outreaches out of which **166,835** are children

134, 185 spectacles given out of which **2,663** are for children

6,641 cataract surgeries conducted out of which **371** are children

Enhancing access to Eye Health services among school-going children

To enhance access to eye care services in schools, the project has raised awareness among key stakeholders, including teachers, school management, directors of education, and curriculum support officers. It leverages existing structures, such as the Ministry of Education and the Teachers Service Commission at the local level, as well as head teachers, school health clubs, and school management committees, to mobilise schools for eye care services. School screenings are conducted by Community Health Assistants and Public Health Officers, and students with eye problems are referred for treatment during outreach sessions, often held within the same day at the schools.

School screenings start with educating children on preventive measures in eye care during assemblies. Eye screenings are then carried out using PEEK technology, carefully organised to avoid disrupting regular learning activities. Students identified with visual impairments are referred to treatment sites where eye health professionals conduct further diagnoses and provide necessary treatments, such as medication, glasses, or referrals for more advanced refraction, diagnosis, or surgery at tertiary facilities. Learners with low vision are directed to Education Assessment Resource Centres (EARC), which have been equipped through the project.

Below: Sheila, a beneficiary of the VIP project during a school screening using Peek technology.

VIP children reach since inception

VIP
School Eye Health Component

1. **Screened**
   Number of learners screened: **802,980**
2. **Referral and Treatment**
   Referred for further evaluation: **178,413** (22% of those screened)
   Attended treatment at Primary level: **166,835** (93% of those referred)
3. **Outcome of Treatment**
   True positives (overall): **131,451**
   False positives (overall): **16,798**
4. **Refraction Services**
   Refraction referrals: **13,047** (10% of referrals)
   Numbers refracted: **12,733** (82% of those referred for refraction)
5. **Refraction Results**
   True positives for refraction: **10,053** (79% of those refracted)
   False positives for refraction: **2,681** (21% of those refracted)
   Prescription spectacles: **5,084**

The VIP project in action

When Grace, a 41-year-old mother of five, visited Embu Level 5 Hospital earlier this year, she hoped to finally receive the help she desperately needed to restore the eyesight of her three children, aged 4, 6, and 8 years.

"I can't find meaningful work because I need to dedicate all my time to care for them. My husband is unemployed and only does menial jobs, barely meeting our basic needs," Grace recounted when a team from African Inland Church Health Ministries (A VIP partner) visited her home in Mbeere South Sub-County in June 2023.

The children's education had been severely impacted by their condition, as they could not see their way to school, which is about 20 minutes from their home. Additionally, the school lacked the necessary infrastructure and human resources to support learners with visual impairments.

Through the VIP project, the three children were diagnosed with bilateral congenital cataracts. They were referred to a tertiary eye hospital, where they underwent successful surgeries.

The mother couldn't contain her joy after the successful surgeries and the prospects of the positive impact this would have on their lives and the family. "The children are now happy, and they can now learn without difficulty. This has eased the burden of caring for them, and I hope to have more time to work and provide for their basic needs. The surgeries have truly transformed our lives," she expressed with excitement.

Mr Njoka Kathara, a teacher at J.N. Mwonge Primary School, where the three children are pupils testified that the children had indeed improved in their ability to learn.

"It was difficult for them as they could hardly see, they struggled much with reading and concentration. After the intervention, they are now more confident and able to read and write, and are improving in their academics," Mr Njoka said.

Below: The three children after surgery.
Bottom: The three children in school.

"Key best practices in the school screening program include close collaboration with relevant stakeholders, leading to improved screening, diagnosis and distribution of spectacles. Additionally, enhanced lighting in classrooms through the installation of transparent iron sheets in model inclusive schools has enabled many children to read more easily and has influenced school health policies. In Vihiga County, all Early Childhood Development Education Centers are now required to install transparent iron sheets in every classroom."

Maureen Korir, CBM IHI Programme Manager

CBM Collaborates with Sight Savers for Greater Impact in Nigeria

In 2020, CBM and SightSavers partnered to implement joint projects in the Plateau State of Nigeria. The state government and local stakeholders, identified the central and southern zones of the state for project implementation.

Hospitals located in Shendam and Pankshin were chosen for their accessibility, the presence of at least one ophthalmic nurse, and existing eye health outpatient services.

SightSavers focused its efforts in the southern zone, while CBM concentrated in the central zone. Together, we have enhanced and expanded existing healthcare structures to improve the availability and quality of eye health services for local communities. Although we worked in distinct implementation areas, the project was planned, coordinated, and monitored collaboratively to ensure a cohesive approach and maximised impact.

The project adopted a district-based approach, integrating eye health services across all levels of the health system. Primary health care workers were trained to identify eye conditions, manage straightforward cases, and refer patients requiring surgical or more complex care to secondary hospitals. To support this, hospital facilities were upgraded to ensure full accessibility and were equipped with additional equipment, medications, and supplies. Additionally, ninety-two primary health centres were provided with essential equipment to strengthen their capacity to provide basic eye care.

A Rapid Assessment of Avoidable Blindness (RAAB) survey was carried out in Plateau State to provide prevalence baseline data. This data enabled precise and targeted planning of activities. Additionally, the two organisations collaborated to support the establishment of the local state eye health committee to help develop effective leadership and governance structures and worked on improving patient data management to strengthen the national eye health reporting system.

Collaboration between the two organisations has been crucial to the project's success and to addressing significant challenges such as high inflation, industrial strikes, and local conflicts. Sharing approaches, experiences, and resources has enabled greater reach and improved value for money, particularly through joint activities such as training. The combined advocacy efforts of both organisations have strengthened linkages between the federal and state Ministries of Health, leading to the prioritisation of eye care across Plateau State in Nigeria.

Until the end of 2023, this project had delivered over 25,000 screenings, over 6,000 clinic consultations, six outreach visits and 725 cataract surgeries. Two ophthalmologists had been recruited and 96 Primary Health Care staff had been trained in primary eye care.

> "Primary health care workers were trained to identify eye conditions, manage straightforward cases, and refer patients requiring surgical or more complex care to secondary hospitals."

Below: Plateau State Eye Health Coordinators during a coordination meeting.
Bottom: Joint SightSavers and CBM visit to the Nigeria Plateau State Programme, Nov 2023. © CBM

The CBM Scholarship Programme – Alumni Making Impact in the Eye Health Space

A major challenge for the implementation of Integrated People-Centred Eye Care (IPEC) in Sub-Saharan Africa is the critical shortage of trained ophthalmologists. To address this, CBM established a scholarship programme in 2000 to support Human Resources for Eye Health by funding postgraduate degrees in Ophthalmology for doctors across the region.

This initiative aligns with CBM's commitment to improving the quality of life for persons with disabilities in the world's poorest areas.

To date, the programme has supported 130 doctors from 12 Sub-Saharan African countries where CBM operates. For the 2023 to 2024 academic year, 12 doctors received scholarships and are currently training at various institutions across Africa.

Making an impact in the eye health space

Beneficiaries of the scholarship programme are serving in different capacities within the eye health space as general ophthalmologists, senior university lecturers of Ophthalmology, head of eye health units and departments within teaching and referral hospitals, eye health coordinators within Ministries of health and researchers and innovators within the eye health space.

A focus on Dr. Mwanansao, a CBM Scholarship Programme alumni

Dr. Mwanansao, a CBM scholarship recipient, graduated with a master's degree in Ophthalmology in 2016 and returned to Bugando Medical Centre, a rural hospital in Mwanza, Tanzania.

Below: Dr. Mwanansao

Through his efforts, a modern, well-equipped eye health unit was established, significantly improving access to eye care. In 2023, the hospital served over 7,000 patients per quarter, more than doubling the 3,000 patients per quarter seen in 2021.

How was the CBM's scholarship beneficial to you?

I received a full scholarship which meant that I was able to balance my family and studies financial requirements. Apart from the tuition fees, it also provided a book allowance which came in handy in ensuring that I had access to the most recent books. To become a good doctor, you need to have good exposure in different matters, CBM scholarship paid for my International Council of Ophthalmology (ICO) examinations as well as supported me to attend one academic conference. The CBM scholarship indeed significantly contributed to my Ophthalmology career.

Continued overleaf...

Why did you come back to work at Bugando Medical Centre?

After completing my studies, I returned to work at Bugando for two reasons: to honour the CBM agreement bond and out of my passion to serve my community in the Lake Zone, a rural area with 16 million people.

What has been your contribution to the eye unit?

When I returned as an Ophthalmologist in 2016, the department was in a poor condition. It lacked a full-time ophthalmologist, with only one junior specialist, and the hospital had just one slit lamp and operating microscope. The clinic had very limited space, and there were no proper wards for patient admission. My first task was to work with the hospital head to restore eye care services in the eye unit. In 2018, as head of the eye health department, I initiated a partnership with CBM that secured funding for a new eye clinic and improved paediatric eye services. This upgrade included additional consultation rooms, three operating beds, and advanced equipment like OCT, visual field, and ocular ultrasound machines, enabling the eye unit to perform approximately 300 cataract surgeries per quarter.

What has been your experience working with children?

Bugando has only one paediatric ophthalmologist, and the demand for children's eye care continues to grow. We see many cases of children with eye trauma, particularly open globe injuries, but unfortunately, many are brought in too late, leading to blindness that could have been prevented. My hope is that we will eventually have an additional paediatric ophthalmologist to meet the rising needs and establish a programme to support children in accessing timely eye care, helping to prevent avoidable blindness.

What are your future plans concerning your career and the eye health unit at Bugando Hospital?

My dream is to introduce surgical retina services and a master's programme in ophthalmology in Bugando Medical Centre. This I believe will not only help me to utilise my skills more but also benefit and mentor more eye health specialists and in the long run ensure universal access to eye health services in my community and Tanzania at large.

> "Dr. Mwanansao is young, energetic, dedicated and cooperative. The Hospital has benefitted from his knowledge and expertise in enhancing eye care services. He was the link between CBM and the hospital in the collaboration to expand the eye health services at the hospital."
>
> **Dr. Massaga, Director Bugando Medical Centre**

Top right: Dr. Mwanansao administering an eye drop to a child while at work.

Right: Bugando Medical Centre Eye Centre constructed through the support of CBM.

Advocacy – Influencing Policies and Practices in Eye Health

> “CBM is dedicated to advocating for policies and practices in inclusive eye health aimed at making eye health a priority, striving to make quality eye care accessible to everyone.”

Beatrice Theuri, CBM IHI Advocacy manager

Below are some of the key advocacy forums and moments that we engaged in during the year.

Friends of Vision (FOV)

Established in October 2018 with an aim to advance the issue of quality eye health for all, to raise its profile on the international agenda, share knowledge and learnings from the sector with and among Member States. Specifically, FOV promotes eye health as an accelerator for progress on the Sustainable Development Goals (SDGs), positions eye health as a global development issue, and develops strategic relationship with United Nations institutions. The FOV has been advocating for a Special Envoy on Vision to lead the implementation of the UN resolution on Vision and to mobilise global and national action across sectors.

WHO Global SPECs Network

CBM is a member of the network for the period January 2024 to December 2026. It aims to assist countries in achieving the global eye care target of a 40% increase in the proportion of people with access to appropriate spectacles. It envisions a world in which everyone who needs a refractive error intervention has access to quality, affordable and people-centred refractive error services. As a member of the Network, CBM will connect, share knowledge, and learn from other stakeholders in the eye health sector.

Below: Dr. Babar and Joy of CBM with WHO representatives during the launch of the SPECs Initiative.

World Sight Day

We utilise the World Sight Day held on the 2nd Thursday of October every year as a key advocacy and awareness moment to put eye health on the global map. It is an opportunity to call on governments and the private sector to make eye health accessible, available and affordable for everyone by 2030. The theme for 2023 was love your eye at the workplace and many CBM projects utilised the day to create awareness on the importance of loving your eyes and called governments and employers to action.

Left: Mrs Kores, a Maasai beader and beneficiary of the VIP project in Kenya says that eyesight is everything.

The IAPB advocacy core group

CBM works with other eye health stakeholders to elevate eye health as a cross-cutting development issue while ensuring its inclusion in global policy development. Key advocacy opportunities of engagement include advocacy for inclusion of eye health in Universal Health Coverage at the UN high level meeting on UHC, and inclusion of eye health indicators in the World Health Organization General Programme of Work and monitoring framework.

2030 Insight at Mexico Conference

CBM CEO, Dr. Rainer Brockhaus and Director of Inclusive Eye Health Initiative, Dr. Babar Qureshi attended the 2030 Insight Live in Mexico where they not only joined other global leaders, innovators and changemakers to discuss and take action on the 2030 In Sight Strategy, but also led discussions as panelists in two side events focusing on tele refraction and inclusion in eye health.

Above: Dr. Babar (2nd left) and Dr. Rainer (4th right) together with other panelists during a session during the 2030 In Sight in Mexico.

COECSA Annual Congress

The Annual Congress of the College of Ophthalmologists of Eastern, Central and Southern Africa (COECSA) was attended by several CBM staff members. CBM is a major partner of COESCA due to its extensive investment in eye health in the region. In attendance is also the CBM scholars under the scholarship programme and this offers them an opportunity to network and learn from different stakeholders in the eye health space.

At the country level

Pakistan

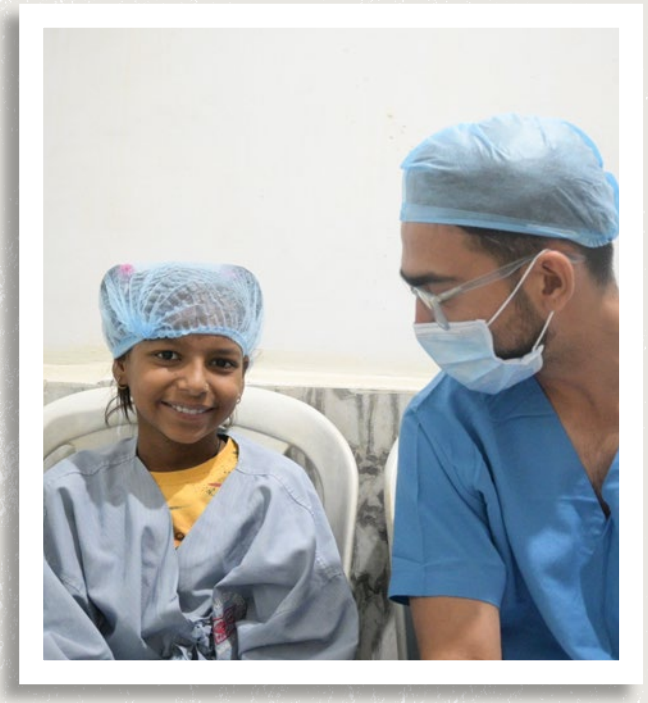
Apart from engagement in global advocacy, the CBM country offices are intentional in advocacy for eye health and are realising great results. In Pakistan, the first District Inclusive Eye Health Committee (DIEH) was established and the first ever District Inclusive Eye Health Plan 2024 to 2026 for the province of Punjab launched, as a result of the advocacy efforts by the CBM Country Office. This marked a significant milestone in the pursuit of inclusive eye care in Pakistan.

Kenya

The Kenya Country Office was awarded an Honorary membership to the Advisory Council to the Africa Ophthalmology Council (AOC). The award is in recognition of CBM's contribution in Kenya in strengthening eye health systems under Vision Impact Project. The Advisory Council is the supreme body that offers guidance to Africa Ophthalmology Council members on all aspects of eye health.

Below: David Munyendo , CBM Kenya Country Director with the AOC membership award.

> "The Kenya Country Office was awarded an Honorary membership to the Advisory Council to the Africa Ophthalmology Council (AOC)."



Above: Ten-year-old Ritu, from the small village of Bhopal in India, can now smile as her dream of becoming a teacher has become more achievable after undergoing successful cataract surgery at the CBM-supported Sewadesan Hospital. © CBM/Sheikh

Above: 18-year-old Anjali from India was diagnosed with bilateral developmental cataract. After surgery, Anjali's vision in her right eye improved by almost two times. Her quality of life has improved significantly and she can pursue her education, engage in daily activities and explore her full potential. © CBM

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