

# Sightsavers

Strengthen National Capacities on Paediatric Ophthalmology for Quality Child Eye Health in Bangladesh  
(Contract no. APC-GM-0010)

**Final Evaluation Report**



## **Advancing Partners & Communities**

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Evaluation undertaken by Avicenna Consulting (Pvt) Ltd

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# ACRONYMS

ANC	Antenatal Care
BCCC	Bangladesh Childhood Cataract Campaign
BCG	Bacillus Calmette–Guérin
BJAKS	Bangladesh Jatya Andha Kalyan Somiti
BNSB	Bangladesh National Society for the Blind
CBL	Childhood Blindness
CBR	Community Based Rehabilitation
CEH	Child Eye Health
CEITC	Chittagong Eye Infirmary and Training Complex
CHW	Community Health Worker
DPT	Diphtheria Pertussis Tetanus
FGD	Focus Group Discussions
GDP	Gross Domestic Product
HDI	Human Development Index
IEC	Information-Education & Communication
IMR	Infant Mortality Rate
M&E	Monitoring and Evaluation
MIS	Management Information System
MLOP	Mid-Level Ophthalmic Personnel
MPI	Multidimensional Poverty Index
NEC	National Eye Care
NIO&H	National Institute of Ophthalmology and Hospital
OECD	Organisation for Economic Co-operation and Development
PHC	Primary Health Care
ROP	Retinopathy of Prematurity
SOMC	Sylhet M.A.G. Osmani Medical College & Hospital
SSI	Semi Structured Interviews
TORs	Terms of Reference
U5MR	Under Five Mortality Rate
USD	United States Dollar
VARD	Voluntary Association for Rural Development

VI  
YPSA

Visually Impaired  
Young Power in Social Action

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This Evaluation was conducted by Dr Haroon Awan and Mr Niaz Ullah Khan of Avicenna Consulting Pvt Ltd.

We wish to acknowledge with deep appreciation the cooperation and support received from the implementing partners, namely, National Institute of Ophthalmology and Hospital; Civil Surgeon Gopalganj; District Hospital Gopalganj; and Voluntary Association for Rural Development.

We are extremely grateful to the doctors, schoolteachers and partner staff who shared freely of their time and made valuable suggestions regarding the programme.

To the Sightsavers Bangladesh Country Office team, we express our grateful thanks for all your facilitation, insightful discussions and accompanying us throughout the evaluation.

We extend our gratitude to Sightsavers for having accorded us this invaluable opportunity not only to undertake the evaluation, but also to develop a better understanding of child eye health and subspecialty training needs in paediatric ophthalmology.

While every attempt was made to verify findings from observations, document reviews and interviews, any omission or commission is duly regretted.

Dr Haroon Awan  
Mr Niaz Ullah Khan

# MAP OF BANGLADESH





# FINAL EVALUATION

## Executive summary

### Description of Programme

From November 2011 to May 2013, a project titled 'Quality Child Eye Health in Bangladesh through Enhancement of National Capacity in Paediatric Ophthalmology' was facilitated by Sightsavers, funded by USAID and managed by World Learning as prime grant manager. The project aimed to increase capacities to train paediatric ophthalmic teams; improve leadership and management at National Institute of Ophthalmology and Hospital (NIO&H) on paediatric eye services; and establish a fully functional paediatric outpatient department at Bangladesh Jaty Andha Kalyan Somiti (BJAKS) Comilla. The current project 'Strengthen National Capacities on Paediatric Ophthalmology for Quality Child Eye Health in Bangladesh' July 2013 - June 2014 was designed to build on the project above. The original project was for a duration of one year starting from 1st July 2013 and ending on 30th June 2014. An extension of three months up to September 2014 was granted to utilise the savings of the project gained under currency exchange and restructuring of planned activities. This was followed by another extension of three months up to December 2014 for the end project evaluation. The project availed a final extension of two months up to February 2015 to purchase some equipment through additional funds made available by JSI/USAID. Although the duration of the project was from 1st July 2013 to February 2015 (20 months), the evaluation team focused only on activities undertaken from 1st July 2013 to September 2014 (15 months).

The overall budget of the project was USD 149,818 spread over a period of 1 year. The major share (58.4%) of the funding was for direct project costs, while 23.8% was for management and staff costs. During the reporting period, the project contract was extended until September 2014, resulting in a total project period of 15 months at a budget of USD 157,719. Another extension to buy additional equipment was granted by JSI so that the total project amount is 172,904 USD, and the project was extended until 28 February, 2015. This last activity however only started after the evaluation had been undertaken and therefore could not form part of this evaluation.

The overall aim of the project was to strengthen the capacity of national paediatric ophthalmology in collaboration with NIO&H of Government of Bangladesh, BJAKS and Sylhet M.A.G. Osmani Medical College & Hospital (SOMC). The partnership with SOMC could not be taken forward as the doctor identified for training was transferred to another hospital and there was no replacement available. The main focus of this project was strengthening of NIO&H and building on the previous partnership with BJAKS.

Its main outputs envisaged included orientation on paediatric eye care of 500 community health workers, 300 school teachers, 240 ophthalmologists, obstetricians and paediatricians, and 10 selected medical officers; training of 2 general ophthalmologists on paediatric eye care; training of 15 mid-level ophthalmic personnel (MLOP) and nursing staff from public hospitals on counselling, reception, operating theatre & ward management, record keeping and basic refraction; overseas training of 2 paediatric ophthalmologists from NIO&H and SOMC on advanced paediatric eye care; overseas training of 2 bio-medical technician on equipment repair and maintenance; hands on training of 12 ophthalmic service providers and MLOPs from SOMC, NIO&H and BJAKS on low vision; and development of protocols, guidelines and Management Information System (MIS).

The programme was implemented through government and NGO partners.

### Evaluation Purpose and Objectives

The purpose of this end-line evaluation was to assess the project achievements against targets to date. The review also aimed to identify the internal and external factors influencing programme delivery, capture key lessons learnt, and recommend strategic direction to further strengthen future programme design.

The evaluation aimed to answer questions under each of Sightsavers' 7 key evaluation criteria terms of reference based on OECD criteria of relevance, effectiveness, efficiency, impact, sustainability, coherence/coordination, and scalability/replicability.

The scope was the entire time from the launch of the project from July 2013 to December 2014. It covered the level of activity and specific results as well as the strategy and intervention logic employed by the partners for achieving the objectives.

The geographic scope of the evaluation included visits to Dhaka and Gopalganj and selected project sites and partners.

### **Brief Description of Methods and Analytical Strategy**

A comprehensive document review of the project proposal, progress updates, and key performance indicators was carried out and the methodology developed after consultation with Sightsavers Bangladesh Country Office and Sightsavers UK.

In order to conduct the evaluation, we developed a 'schematic diagram of intervention' that had three components – training and orientation, strengthening institutional capacities, and services for beneficiaries. We further developed an evaluation matrix with indicators. A variety of data collection methods were utilized, which included interviews, focus group discussions and onsite observations. Separate instruments were developed for these. The detailed methodology was presented in an Inception Report, which after various inputs was approved by Sightsavers.

Data analysis methods included systematization of data collected into relevant Terms of Reference (TORs) and analysis as per TORs.

### **Summary of Main Findings/Conclusions**

The evaluation revealed that the project has largely met or exceeded its targets.

**Relevance** – the project is well aligned with the Childhood Blindness Study 2003, Child Rights, Global Action Plan for Universal Eye Health 2014-2019, MDGs and health, National Eye Care (NEC) plan, UNCRPD article 25 on health, Vision 2020 – The Right to Sight and the WHO Health Systems framework. The project has also aligned itself with an emerging eye health problem in children, retinopathy of prematurity and has oriented obstetricians, paediatricians and neonatologists on its prevention and timely treatment.

**Effectiveness** – the project has achieved an impressive achievement of targets. Short-term trainings of various cadres like ophthalmologists, technicians, nurses and mid-level ophthalmic personnel in paediatric eye care relevant to their level of competency were carried out. A large workforce of Community Health Workers (CHWs) and teachers were trained as well in primary eye care, while a very useful precedence was set in orientation of other specialist health professionals like obstetricians, paediatricians and neonatologists in paediatric eye care issues. However, short-term training abroad was more observership rather than hands-on which would have enhanced effectiveness.

**Efficiency** – anecdotal evidence demonstrated that there was an increase in outpatients and number of surgeries. While it is difficult to attribute this to the short-term trainings alone, the combined effect of orienting district ophthalmologists in paediatric eye care, improving the soft skills of nurses and mid-level ophthalmic personnel, and training CHWs and teachers in primary eye care has had a cumulative effect on the delivery of paediatric ophthalmic services. However, this has also raised issues on the usefulness and timing of short-term observership trainings, the requirement for training needs assessment and competency frameworks to guide capacity development, and rationalising the type of child eye health services at district level in light of the competencies and what district ophthalmologists can realistically deliver.

**Impact** – there was an increase in children screened and refracted. BJKS demonstrated a significant increase in both screenings and refractions. There was also a marked increase in paediatric outpatient








attendances at the eye clinics in Gopalganj and Chapainawabganj. However, there was not much difference observed at Noakhali. Gopalganj demonstrated a 68% increase between Q4 2013 and Q2 2014, while Chapainawabganj demonstrated an impressive 167% increase during the same period. The overall total increase was 52% in three quarters. One of the key impacts of the project was the initiation of the long-term subspecialty fellowship training in paediatric ophthalmology at NIO&H. A protocol and guidelines for paediatric ophthalmology have been developed and will become national resource documents. The referral pathway from CHWs to district ophthalmologist has indicated the potential for identification of children with eye health needs.

**Sustainability** – the project has led to some areas that can be considered as lasting changes. For instance, the long-term paediatric ophthalmology subspecialty fellowship training programme at a government centre of excellence will likely continue well into the future and produce a stream of competent paediatric ophthalmologists to meet the future needs of the country. The development of a protocol and guideline for paediatric ophthalmology will help establish national standards for the subspecialty services. The project has made a strategic entry point for school and community eye health in the districts and needs to be explored further to take advantage of gains made through engagement with the Civil Surgeons. In the last five years following the ending of the Bangladesh Childhood Cataract Campaign, there is a renewed intensity of investment in child eye health by international NGOs, but it is fragmented. It is progressing in the absence of a stewardship mechanism to guide strategic direction and there is lack of a revised child eye health strategy aligned with national needs.

**Coordination/Coherence** – the project has demonstrated several points of synergy. Of particular note are the linkages developed with obstetricians, paediatricians and neonatologists and this is an area that needs to be nurtured further to enhance overall awareness about child eye health. The training of teachers and CHWs were complimentary to each other as both were part of the local communities and therefore more effective in awareness raising and referrals.

**Scalability/Replicability** – although it is early to claim a scaling up in the post-project period, there are some potential options for scalability. For instance, subspecialty fellowship training at NIO&H, training of CHWs in primary eye care and teachers in vision screening can be taken to scale. More recently, the Little Doctors programme of the Ministry of Health provides an invaluable opportunity to integrate vision screening in their programme and reach 20 million children in 82,000 primary schools.

#### Overall Ratings for Evaluation Criteria (see Methodology for details)

	RELEVANCE
	EFFECTIVENESS
	EFFICIENCY/COST EFFECTIVENESS
	IMPACT
	SUSTAINABILITY
	COORDINATION/COHERENCE
	SCALABILITY/REPLICABILITY

## Recommendations

1. Foster networking between the Bangladesh Association of Paediatric Ophthalmologists and Strabismologists, Bangladesh Paediatric Association and Bangladesh Society of Neonatal and Paediatric Intensive Care to identify joint areas for priority action
2. Develop appropriate human resources to deliver paediatric ophthalmic services according to an overarching national strategy
3. Hold a national consultation with other non-project stakeholders to formulate a unified national strategy for developing human resources to deliver low vision and orthoptic services
4. Define minimum standards of service delivery of child eye health services for district health care, and develop the capacities of district ophthalmologists for improved refraction in children
5. Develop an integrated child eye health approach in a pilot district that derives synergy from on-going health initiatives and builds on existing governance structures for health, education and child rights
6. Develop task forces under the auspices of NEC, drawing membership from relevant professional associations, national and international NGOs and training institutions, to jointly develop a national strategic plan for child eye health
7. Extend administrative and technical support to the Association of Paediatric Ophthalmologists and Strabismologists, to establish a secretariat, hold periodic national conferences and symposia, and attend and participate in international meetings of the American Association for Paediatric Ophthalmology and Strabismus
8. Derive maximum synergy from the 'Little Doctors' programme to obtain access to universal child eye health promotion amongst children and institutionalise vision screening by children

## I. INTRODUCTION AND BACKGROUND

Bangladesh is one of the most densely populated countries in the world. It has an estimated population of over 150 million with a population density of 1015 persons per sq Km. The life expectancy rates are slightly higher in females (68.8 years) compared to males (66.6 years), and about 27% of the population is urbanized .

Bangladesh is ranked at 142 on the Human Development Index (HDI) with a scale of 0.558. It has a Gross Domestic Product (GDP) per capita of USD 2364 . It has a Multidimensional Poverty Index (MPI) of 0.237 with 49.5% of the population affected by multidimensional poverty. About 21.0% of the population lives in severe poverty. Bangladesh spends about 3.7% of its GDP on health.

The percentage of women age 20-24 years who were first married by age 18 years is about 64.9%, while the percentage of women age 15-19 years who have begun childbearing is about 30.2% indicating high fertility rates. Only 31.7% live births receive skilled birth assistance, while 59.8% of live births in highest quintile deliver in health facilities compared to 9.9% in the lowest quintile. The percentage of last live births for which women received at least one antenatal care (ANC) from a medically trained provider is about 54.6% .

Even though decadal trends have shown a reduction in child mortality, the Infant Mortality Rate (IMR) of 43 and Under Five Mortality Rate (U5MR) of 53 are still high. About 82.5% of children age 12 months have received 'All vaccines' (BCG, DPT3, Polio3, Measles) . About 59.5% of children age 6-59 months received Vitamin A supplementation in the last six months. About 63.5% of children under 6 months are exclusively breastfed (based on 24 hour recall), while 20.9% of children 6-23 months are fed with appropriate infant and young child feeding practices.

A national childhood blindness study was conducted in 2003 by the International Centre for Eye Health UK (sponsored by Sightsavers) that estimated a childhood blindness prevalence rate of 0.7 per 1,000 children. It was estimated that there were about 40,000 children blind in both eyes, a third of whom were blind due to cataract. In order to address this high magnitude of cataract blindness in children, an alliance called the 'Bangladesh Childhood Cataract Campaign' (BCCC) was formed and comprised of the following partners:

- BJAKS Comilla Eye Hospital
- Bangladesh National Society for the Blind (BNSB) Khulna Eye Hospital
- BNSB Sirajganj Eye Hospital
- Community Based Rehabilitation (CBR) projects
- Chittagong Eye Infirmary and Training Complex (CEITC), Chittagong Eye Hospital
- Child Sight Foundation
- International Centre for Eye Health
- Islamia Eye Hospital
- Ministry of Health and Social Welfare, Government of Bangladesh
- ORBIS International
- Sightsavers International
- Uttaran
- YPSA

The campaign was launched in 2004 and aimed to treat at least 90% of cataract backlog in children. A strategic evaluation of the project was undertaken in 2010 and found that the project achieved 82% of its target to identify 40,000 blind children, and 77% of its target to operate 10,000 children blind from cataract .

From November 2011 to May 2013, a foundation project titled 'Quality Child Eye Health in Bangladesh through Enhancement of National Capacity in Paediatric Ophthalmology' was facilitated by Sightsavers, funded USAID, and managed by World Learning as prime grant manager. The project aimed to increase capacities to train paediatric ophthalmic teams; improve leadership and management at NIO&H on paediatric eye services; and establish a fully functional paediatric outpatient department at BJAKS Comilla .

The current project 'Strengthen National Capacities on Paediatric Ophthalmology for Quality Child Eye Health in Bangladesh' July 2013 – February 2015 builds on the foundation project above. In summary, the continuum of child eye health projects includes the following:

- Bangladesh Childhood Cataract Campaign – 2004-2010, and ongoing
- Quality Child Eye Health in Bangladesh through Enhancement of National Capacity in Paediatric Ophthalmology – 2011-2013
- Strengthen National Capacities on Paediatric Ophthalmology for Quality Child Eye Health in Bangladesh – 2013-2014

The overall aim of the project was to strengthen the capacity of national paediatric ophthalmology in collaboration with the National Institute of Ophthalmology and Hospital (NIO&H) of Government of

Bangladesh, Bangladesh Jatyā Andha Kalyan Somiti (BJAKS) and Sylhet M.A.G. Osmani Medical College & Hospital (SOMC). The partnership with SOMC could not be taken forward as the doctor identified for training was transferred to another hospital and there was no replacement available. The main focus of this project was strengthening of NIO&H and building on the previous partnership with BJAKS.

The overall budget of the project was USD 149,818 spread over a period of 1 year. The major share (58.4%) of the funding was for direct project costs, while 23.8% was for management and staff costs.

During the reporting period, the project contract was extended until December 2014, resulting in a total project period of 18 months (covered under this evaluation) at a budget of USD 157,719. Additional funds of USD 7,902 were awarded to Sightsavers, which were to be utilized for the following activities: additional field based orientation on primary eye care for community health workers and schoolteachers. A new activity to print Information-Education & Communication (IEC) materials was planned utilizing unspent funds saved from various activities. In addition, an approval to undertake the project review in December 2014, during the no-cost extension period of October to December 2014, was also granted.

**The key results expected of the project were:**

1. NIO&H, SOMC and BJAKS have increased capacity to handle childhood blindness and cascade down knowledge to new professionals.
2. District hospitals in Chapainawabganj, Gopalganj, Noakhali, and Sylhet have increased capacities to identify and refer children in need of eye services.
3. An efficient referral chain established from community clinics to tertiary-level hospitals for childhood eye care services

**The key outputs envisaged in the project proposal included the following:**

- Orientation of 500 community health workers and 300 school teachers on paediatric eye care to strengthen early identification, referral to appropriate facilities and field follow-up
- Orientation of 240 ophthalmologists, obstetricians and paediatricians of selected geographical areas for early referral of paediatric eye care patients
- Orientation of 10 selected medical officers from government sector on PEC and paediatric eye care guideline to support general treatment and referral
- Training of 2 general ophthalmologists on paediatric eye care to increase referral and patient outreach
- Training of 15 mid-level ophthalmic personnel (MLOP) and nursing staff from public hospitals on counselling, reception, operating theatre and ward management, record keeping and basic refraction
- Overseas training of 2 paediatric ophthalmologists from NIO&H and SOMC on advanced paediatric eye care
- Overseas training of 2 bio-medical technician on equipment repair and maintenance
- Hands on training of 12 ophthalmic service providers and MLOPs from SOMC, NIO&H and BJAKS on low vision
- Develop protocols, guidelines and MIS

**The key project implementing partners included the following:**

- NIO&H is a tertiary eye health centre with a paediatric eye department and a training institute. It assists with on-the-job learning of new paediatric ophthalmologists after deployment. Since its establishment in early 80's, Sightsavers has been working with NIO&H on eye care programmes.
- BJAKS is a registered NGO with the Department of Social Services and the NGO Affairs Bureau of the Government. It offers training of ophthalmic assistants. With its extensive experience in eye care and rehabilitation services it caters for the eye care needs of Comilla and its adjacent 5 districts. BJAKS and Sightsavers have a long history of working together and had a successful partnership in the BCCC project. Its 2012 annual budget was over USD 800,000.
- SOMC is a government medical college in Bangladesh, located in Sylhet District. It has a small paediatric eye care unit, with the potential to increase its services and reach to cater to children of Sylhet and adjacent districts. SOMC offers Master's degrees in Ophthalmology and the courses are certified by Shahjalal University of Science and Technology and recognized by Bangladesh Medical and Dental Council. However, the partnership arrangement with SOMC did not materialize. This was replaced by collaboration with VARD and the district hospital for further training, equipment maintenance in VARD and orientation of a district ophthalmologist in Sylhet.

Key output indicators developed in the M&E framework served as the targets for reference and review. These targets were then realigned for project partners. Implementation was supported by quarterly work plans jointly agreed by Sightsavers and implementing partners.

The purpose of this end-line evaluation was to assess the project achievements against targets to date. The review also aimed to identify the internal and external factors influencing programme delivery, capture key lessons learnt, and recommend strategic direction to further strengthen future programme design.

The evaluation aimed to answer questions under each of Sightsavers' 7 key evaluation criteria terms of reference based on OECD criteria of relevance, effectiveness, efficiency, impact, sustainability, coherence/coordination, and scalability/replicability.

The scope covered the entire period from the launch of the project in July 2013 to December 2014. It covered the level of activity and specific results as well as the strategy and intervention logic employed by the partners for achieving the objectives.

The geographic scope of the evaluation included visits to Dhaka and Gopalganj and selected project sites and partners.

The main audience and stakeholders include Sightsavers Bangladesh Country Office, implementing partners, national eye health committee, Sightsavers departments in UK, USAID and JSI.

## **II. METHODOLOGY**

### **Overall Approach**

During this first phase, a comprehensive document review of the project proposal, progress updates, and key performance indicators has been carried out and the methodology developed after consultation with Sightsavers. The detailed planning of data gathering and field visits is an important part of the inception phase.

In order to conduct the evaluation, we developed a ‘schematic of intervention’ of the project that helped us understand the various components and how they interact with each other. The schematic is used to further refine the evaluation questions, determine what specific areas the evaluation team plans to review, and will also help in identifying data management requirements. This is shown in the section on Schematic.

The schematic identified an ‘anchor’ shape of activities (comprising mainly of 3 components – training and orientation, strengthening institutional capacities, and services for beneficiaries), for which we categorized the different components into 8 programme actions developed for this evaluation. These include:

#### **Educate**

This refers to community eye health education for raising awareness and increasing demand for child eye health services.

#### **Screen**

This refers to screening of school children for vision and eye problems.

#### **Refract**

This refers to children who after screening were found to have vision impairment and required refraction.

#### **Refer**

This refers to children identified at various health care levels (community, primary health care, district hospitals, and tertiary hospitals) with blinding cataract and referred to the specialist tertiary centres for treatment and surgery. It also emphasizes the referral pathway.

#### **Orient**

This refers to orientation of various health cadres in child eye health to promote improved detection and referral.

#### **Train**

This refers to training abroad of various health cadres, especially paediatric ophthalmologists and biomedical technicians.

#### **Capacitate**

This refers to strengthening service capacities at selected district hospitals and tertiary hospitals for managing paediatric ophthalmic problems appropriate to the level of care.

#### **Operate**

This refers to the surgical intervention to treat cataract in children.



Our approach to the evaluation would therefore reflect these 8 programme actions under the criteria provided by Sightsavers in the TORs.

### **Evaluation Matrix and Indicators**

An evaluation matrix with indicators was developed for the evaluation and is shown in Appendix 1.

### **Data Collection and Data Analysis Methods**

The data gathering took place in field visit sites in Dhaka and Gopalganj agreed in consultation with Sightsavers Country Office during the inception phase. A combination of tools and methods were applied in this phase, tailor-made to contexts and stakeholders and selected with an eye to strength of evidence creation. The tools focused on appreciative methods of exploring and include strong elements of learning, qualitative and quantitative data, and comprised (but were not limited to) interviews, focus groups, document review and observation.

The primary data from the stakeholders was collected through Focus Group Discussions (FGD) and Semi Structured Interviews (SSIs). The data was analysed on the basis of emerging trends from the discussions of FGDs and SSIs as well as field observations made by the consultants. These were triangulated with project reports, documents and other secondary sources available like policies, sector strategies, government surveys, etc. Because of time and resource constraints, community surveys were not conducted.

Quantitative data was obtained from project reports, implementing partners and other secondary sources.

Data analysis methods included systematization of data collected into relevant TORs and analysis as per TORs. Quantitative data is presented as graphs, charts and tables as appropriate; qualitative data was analysed thematically and presented as narrative or charts as appropriate. Narrative statements accompany the key findings presented. At the end of each chapter, recommendations emerging from the findings are noted. Key lessons are also noted and presented in a separate section under that heading.

At the end, the team conducted a de-briefing/validation meeting with Sightsavers Country Office team to present preliminary findings and conclusions and receive comments and viewpoints to be considered in the further formulation of the evaluation outcome.

The structure of the report is based on the scope levels presented in the TORs, i.e. Relevance, Effectiveness, Efficiency/Cost-Effectiveness, Impact, Sustainability, Coherence / Coordination, Scalability / Replicability, Conclusions, Learning and Recommendations.

### **Key Data Sources**

The main data sources included project beneficiaries, project deliverers (implementing partners), persons with knowledge of project recipients (local authorities), project documents, project records, databases, etc (Appendix 2).

A list of persons interviewed or those who participated in FGDs is provided in Appendix 3. The interview questions are shown in Appendix 4.

### **Sampling Methods**

The sampling frame for the evaluation included NIO, NEC, and one district hospital. In the time available for the evaluation, the review team endeavoured to interview a purposive sample of stakeholders including the partners, a selection of teachers available on the day of the visit of the team, local government officials, local communities etc. The evaluation did not involve a community survey, therefore no household sampling was required.







The work plan for the evaluation is shown in Appendix 5.

### **Limitations**

1. In the time frame available, it was not possible to visit all project sites.
2. Of all persons who received training through this project, the evaluation team met with a sample of 1% or less, and therefore they may not reflect the views of most of the others.
3. The evaluation team did not monitor or evaluate the quality of training, but rather focussed on the programmatic issues of the training programmes.
4. The evaluation did not try to address the institutional arrangements of the project vis a vis project implementation e.g. selection of training venues, selection of trainees, sectoral collaborations like education, child rights, social protection.

## Evaluation Criteria Rating

The following evaluation criteria rating developed by Sightsavers were used in this evaluation.

	Highly Satisfactory	There is strong evidence that the evaluated initiative <b>fully meets all or almost all</b> aspects of the evaluation criterion under consideration. The findings indicate a highly satisfactory, largely above average achievement/progress/attainment and potentially a reference for effective practice.
	Satisfactory	There is strong evidence that the evaluated initiative <b>mostly meets</b> the aspects of the evaluation criterion under consideration. The situation is considered satisfactory, but there is room for improvements. Achievement/progress/attainment under this criterion is potentially a reference for effective practice. There is need for a management response to address the issues which are not met.
	Caution	There is strong evidence that the evaluated initiative <b>partially meets</b> some aspects of the evaluation criterion under consideration. There are issues which need to be addressed and improvements are necessary under this criterion. There is need for a strong and clear management response to address these issues. Evaluation findings are potentially a reference for learning from failure.
	Problematic	There is strong evidence that the evaluated initiative is <b>borderline in terms of meeting</b> the aspects of the evaluation criterion under review. There are several issues which need to be addressed. Evaluation findings are potentially a reference for learning from failure. There is need for a strong and clear management response to address these issues.
	Serious Deficiencies	There is strong evidence that the evaluated initiative <b>does not meet key</b> aspects of the evaluation criterion under consideration and is performing poorly. There are serious deficiencies in the evaluated initiative. There is need for a strong and clear management response to address these issues. Evaluation findings are potentially a reference for learning from failure
	Not Sufficient Evidence	There is <b>not sufficient evidence</b> to rate the evaluated initiative against the criterion under review. The programme needs to seriously address lack of evidence in their initiative.

<b>Criteria and Questions for Evaluation</b>	<b>Whether the evaluation addressed these questions or not</b>
<b>RELEVANCE</b>	
How aligned is the project to local, national and international development priorities and policies?	Done
To what extent are Sightsavers and the Government through this project responding to the needs and priorities of the constituencies they work in?	Done
<b>EFFECTIVENESS</b>	
How effectively are trained staff organising individual functions and competently supporting cases?	Partly done as we did not evaluate according to job descriptions
If and how effectively are hospitals managing an increased volume of patients referred to/ walk-in-patients for services?	Done
How has the project delivered against the planned targets and what factors (if any) have contributed / hampered this? What were the various approaches tried? Which ones did not work? Why? What was the learning?	Done
<b>EFFICIENCY/COST EFFECTIVENESS</b>	
How well has the project been implemented?	Done with limitations especially information at district level
How efficient is the referral chain at different levels? What interventions were undertaken to contribute to the improvement of the referral chain by the project? What are the gaps?	Done
<b>IMPACT</b>	
Has the delivery of project outputs and activities led to the desired outcomes? Have there been any unintended / additional outcomes? (checked against summary M&E matrix, and M&E reporting tool	Done
What are the main changes produced by the programme, positive or negative and what are the key factors behind these changes in the life of the beneficiaries, and the participating hospitals?	Done
What are the broader systemic changes brought about by the intervention, directly or indirectly that will lead to improvement of the overall Health systems?	Done
What changes (if any) are evident in the capacity of the partner hospitals and nationally? Will they be able to continue the same beyond the project duration and geography?	Done
What are the perception of the service recipients or parents/ local authorities/ government of the project and its impact?	Done
How effective was the coordination between partners / stakeholders? How has this increased the service delivery efficiency? Any gaps?	Done

<b>Criteria and Questions for Evaluation</b>	<b>Whether the evaluation addressed these questions</b>
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	<b>or not</b>
<b>SUSTAINABILITY</b>	
What are the key lasting changes achieved by this intervention as an overall programme in relation to the Vision 2020 milestones and health systems strengthening agenda?	Done
To what extent is the project intervention likely to be technically, financially and programmatically sustainable? What are the key factors that ensure (or will ensure) sustainability of the programme beyond Sightsavers support?	Done
<b>COHERENCE/COORDINATION</b>	
To what extent has the intervention systemically created synergies with other institutions, towards achieving the defined objectives and goals over time?	Done
To what extent did the programme objectives, approaches and design complement and/or contradict each other?	Done
How did the project engage the community in its intervention? Is there a system developed to maintain such engagement beyond the project period? What else could be done to improve coordination and how?	Partly done through CHWs and teachers
<b>SCALABILITY/REPLICATION</b>	
Is any aspect of the programme or its components likely to be scaled or replicated by participating partners, other agencies or government? How likely is this to occur or what conditions need to exist for this to happen? What factors or constraints might inhibit this process?	Done
What evidence has been generated by the project to support scalability efforts by interested parties? How has the project packaged and shared this evidence to date?	Done
In the event of a scale-up, what lessons learnt from the implementation process in this context need to be taken into account?	Done

### III. RESULTS



In terms of progress against some key activities, Table I below summarizes the key outputs from July 2013 to September 2014 against original targets.

It shows that the project has mostly met its targets and in some cases even exceeded them.

**Table I - Overall Programme Achievements**

	Health staff trained in CEH	Teachers trained in school eye health	Nursing staff and MLOPs trained in CEH	Ophthalmic service providers trained in low vision care	Medical officers trained in CEH	Obstetricians and Gynaecologists, and Ophthalmologists oriented in CEH	Technicians trained in biomedical technology	General ophthalmologists from secondary hospital oriented in CEH overseas	General ophthalmologists trained in paediatric ophthalmology
<b>Targets</b>	725 <sup>1</sup>	500 <sup>2</sup>	15	12	10	240	2	2	2
<b>Total achievement July 2013 to Sep 2014</b>	702	496	15	15	7	219	2	2	2
<b>% Achievement against Targets</b>	<b>97%</b>	<b>100%</b>	<b>100%</b>	<b>125%</b>	<b>70%</b>	<b>91%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

The overall impressions of the evaluation team regarding key components are presented below. These are further discussed in later sections.

Health staff trained in child eye health (CEH) – the original target was exceeded and underspends were used to train more CHWs. This cadre plays a key role in identification, awareness raising and referral at the community level. The increased uptake of services is discussed further in the impact section.

Teachers trained in primary eye care – the original targets were once again exceeded and underspends used to train more teachers.

Nurses and MLOPs trained in child eye health – the target for this group was achieved and helped to build team preparedness for providing services to more children in the outpatient departments. This is discussed further in the impact section.

Ophthalmic service providers trained in low vision care – the project exceeded its target and this training resulted in an increase in children treated for low vision.

Medical officers trained in child eye health – this component could not be achieved fully due to administrative reasons of availability and posting. However, it contributed to an overall increase in child eye health awareness and is discussed further under impact.

Ophthalmologists, Obstetricians and Gynaecologists, oriented in child eye health – this is probably one of the major breakthroughs of the project where child eye health was seen as a cross-cutting issue for various specialties. The initial gains made should be used to institutionalise this practice.

<sup>1</sup> Original target was 500, but this was increased to 725 and additional costs were covered by project savings

<sup>2</sup> Original target was 300, but this was increased to 500 and additional costs were covered by project savings

Technicians trained in biomedical technology – the project achieved its target of orienting biomedical technicians to new techniques and equipment maintenance.

General ophthalmologist from secondary hospital oriented in paediatric ophthalmology overseas – this project achieved its target of observership at a training centre abroad.

General ophthalmologists trained in paediatric ophthalmology – the targets to provide short- term training locally was also achieved. This is discussed further under effectiveness and impact.

## Conclusions

The evaluation revealed that the project has met most targets or even exceeded some. One commendable achievement was the orientation of other medical specialists in child eye health, a practice that should be further developed in the future.





Control of childhood blindness (CBL) is an integral part of the national eye care (NEC) programme. It is also one of the five disease areas prioritised by Vision 2020 – The Right to Sight global initiative<sup>3, 4</sup>. The project is well aligned with the global prioritisation of control of childhood blindness.

In May 2013 the 66<sup>th</sup> World Health Assembly unanimously approved the Global Action Plan for the Prevention of Avoidable Blindness and Visual Impairment 2014-2019 - Towards Universal Eye Health<sup>5</sup>. The project is well aligned with action 2.3 of objective 2 of the global action plan, which states:

*“Develop and maintain a sustainable workforce for the provision of comprehensive eye care services as part of the broader human resources for health workforce”*

The project has supported the training of existing staff already deployed and therefore strengthened the existing system. This contributed towards health systems strengthening.

One of the essential components of child rights is the right to health. The project has addressed this right by developing technical capacities to enhance coverage of eye health services for children and also restoration of vision through cataract surgery. This further supports the Government of Bangladesh’s recent legislation on child rights known as the Children Act, 2013, and it has been enacted for the purpose of implementing the United Nations Convention on the Rights of the Child<sup>6</sup>.

The childhood blindness study conducted by International Centre for Eye Health and supported by Sightsavers, CBM and Muslim Aid found that the prevalence of CBL was 0.7 per 1000 children<sup>7, 8</sup>. At least a third of this was due to childhood cataract. The project is highly relevant as it sought to develop capacities for improved referral of children with eye problems. This is discussed further under impact.

The project has also tried to address issues of distance and cost by strengthening capacities for paediatric eye care at district hospitals. This helped to save cost and time of poor families with children with eye care needs that had to travel all the way to Dhaka.

The CHWs felt that the training received through the project served a dual purpose. Firstly, provided them with general orientation and training in primary eye care, and secondly it oriented them on child eye health issues to raise awareness and eye health promotion.

With recent advances in antenatal and neonatal care, the survival rates of low birth weight and preterm infants has improved in Bangladesh. However, this has also resulted in a population of infants at high risk of developing retinopathy of prematurity (ROP), a potentially blinding disease in children if not detected and treated early<sup>9</sup>. Although this project was not specifically related to ROP control, it provided

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<sup>3</sup> <http://www.who.int/blindness/partnerships/vision2020/en/> accessed on 14 December 2014

<sup>4</sup> <http://www.iapb.org/vision-2020> accessed on 14 December 2014

<sup>5</sup> Universal eye health: a global action plan 2014-2019. World Health Organization 2013

<sup>6</sup> Hon Justice M Imman Ali, Justice at the Appellate Division of the Supreme Court of Bangladesh. The Children Act 2013 – Brief Commentary

<sup>7</sup> Bangladesh Childhood Cataract Campaign – Strategic Evaluation, 2010. Sightsavers

<sup>8</sup> M A Muhit, S P Shah, and C E Gilbert, A Foster. Causes of severe visual impairment and blindness in Bangladesh: a study of 1935 children. Br J Ophthalmol. Aug 2007; 91(8): 1000–1004

<sup>9</sup> A. S. M. Nawshad Uddin Ahmed, Humaira Muslima, Kazi Shabbir Anwar, Naila Z. Khan, M. A. K. Azad Chowdhury, Samir K. Saha, and Gary L. Darmstadt. Retinopathy of Prematurity in Bangladeshi Neonates. Journal of Tropical Pediatrics 2008, Vol. 54, No. 5:333-339

orientation of obstetricians, neonatologists and paediatricians to improve awareness about a blinding condition directly related to antenatal care in obstetric services and preterm care in neonatal units.

The evaluation team found that there was no strategic policy dialogue or interaction between the Bangladesh Association of Paediatric Ophthalmologists and Strabismologists, Bangladesh Paediatric Association and Bangladesh Society of Neonatal and Paediatric Intensive Care. There was not enough emphasis on development of professional capacities and improving clinical management protocols of cross-cutting issues of childhood eye disease and blindness.

**The evaluation team found that the project was well aligned with the following:**

Childhood Blindness Study 2003 – in which childhood blindness was found to have a prevalence of 0.7/1000 children

Child Rights – with special reference to right to health

Global Action Plan for Universal Eye Health 2014-2019 – which emphasises development of a sustainable eye health workforce to enhance universal eye health coverage

MDGs and health – directly aligned with MDG on health and women and children

National Eye Care (NEC) plan – aligned with its focus on childhood blindness

UNCRPD – aligned with UNCRPD article 25 on health

Vision 2020 – The Right to Sight – in which childhood blindness is one of the priorities for disease control

WHO Health Systems framework – partial alignment through health workforce development

## Conclusions

The project is well aligned with the Childhood Blindness Study 2003, Child Rights, Global Action Plan for Universal Eye Health 2014-2019, MDGs and health, NEC plan, UNCRPD article 25 on health, Vision 2020 – The Right to Sight and the WHO Health Systems framework. The project has also aligned itself with an emerging eye health problem in children, retinopathy of prematurity and has oriented obstetricians, paediatricians and neonatologists on its prevention and timely treatment.

## Learning

- Childhood blindness is not just a medical condition and needs to be contextualised within the broader areas of child rights, education, social inclusion, gender and equity. These areas are sometimes beyond the scope of clinically oriented projects, but by orienting different service providers and specialist health professionals in child eye health, intra- and intersectoral collaboration can be improved to reduce exclusion.

## Recommendations

- Foster networking between the Bangladesh Association of Paediatric Ophthalmologists and Strabismologists, Bangladesh Paediatric Association and Bangladesh Society of Neonatal and Paediatric Intensive Care to identify joint areas for priority action and develop relevant practice guidelines relating to cross-cutting issues of child eye health

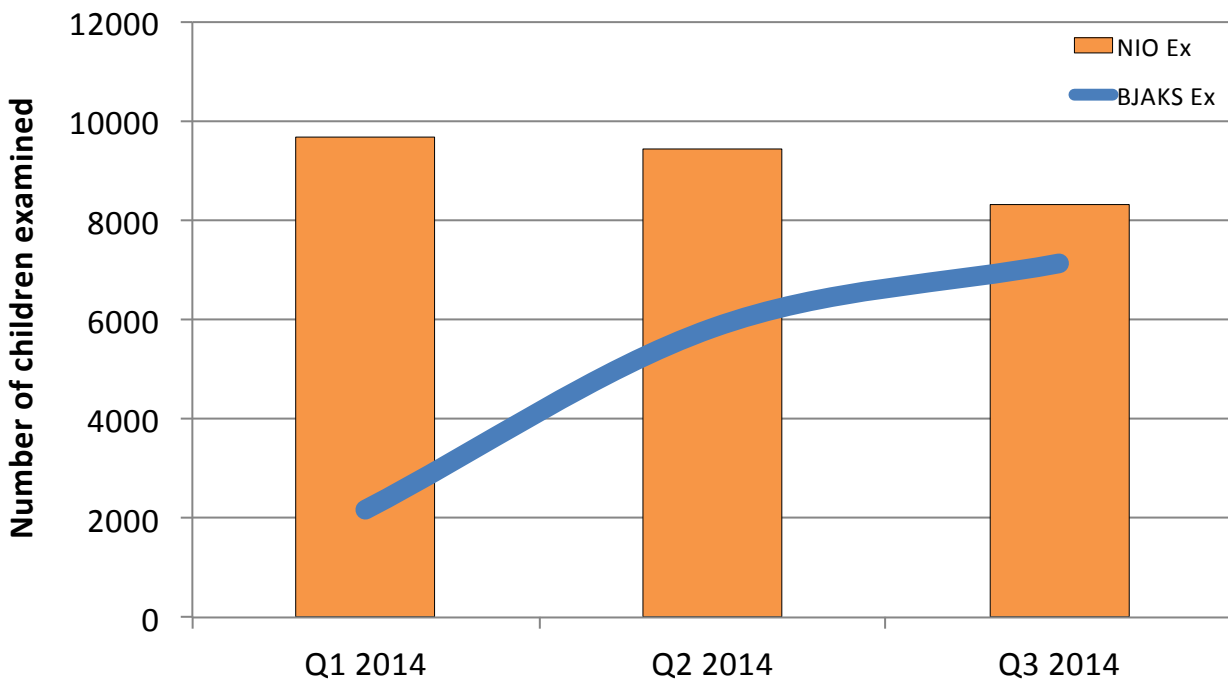


Two staff from NIO&H were sent abroad for a one month observership in paediatric ophthalmology. Both candidates were general ophthalmologists who had obtained FCPS Ophthalmology (Fellow of the College of Physicians and Surgeons of Bangladesh) and were working in the paediatric ophthalmology department. The observership allowed them exposure to management of squints and cataracts, improved their paediatric ophthalmic assessment techniques, to observe new surgical procedures and how a paediatric ophthalmology service was run. On their return, they have already put into practice new techniques for intraocular lens surgery for childhood cataract, and have shared their experiences with other colleagues. One of the candidates has enrolled in a formal 18 months subspecialty training programme on paediatric ophthalmology at NIO&H since November 2014. The other candidate is keen to learn more about management of squints.

Two district ophthalmologists attended a two weeks orientation abroad on paediatric eye care and on their return have seen an increase in the paediatric ophthalmic patient load in the outpatient clinics. This is discussed further under impact.

Figure 1 illustrates an over three-fold increase in paediatric eye patients examined at BJKS between the first and third quarter in 2014. The change at NIO&H is not as dramatic and shows a slight decrease.

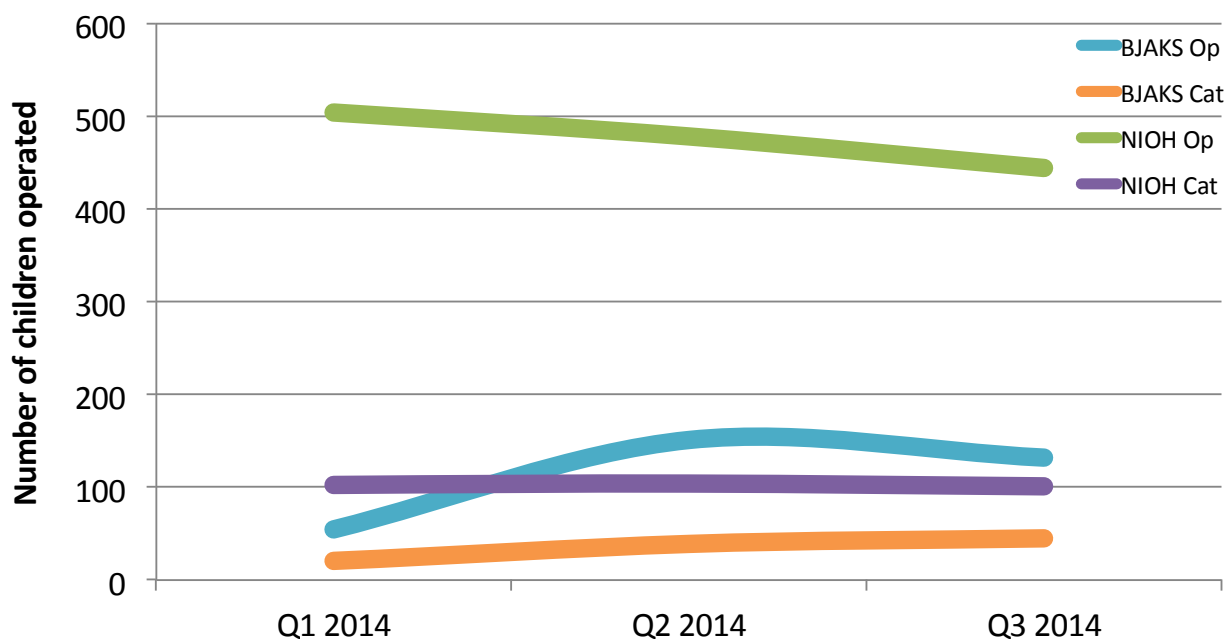
**Figure 1 - Children examined at NIO&H and BJKS**



Key: Ex - examined

A similar picture is seen with total number of surgeries in children and total cataracts operated (Fig 2). The trend at BJKS shows a gradual increase possibly indicating increased community acceptance of the service, while cataract surgery at NIO&H shows a steady straight line suggesting that they may be working at capacity currently.

**Figure 2 - Trends of surgery in children at NIO&H and BJAKS**



Key: Op – operated; Cat – cataract surgery

In addition, two technicians, one working at NIO&H and one at VARD in Sylhet, were sent abroad for a four week observership in preventive equipment maintenance and general repairs. They learnt how to service equipment and do general repairs of eye care equipment commonly found in clinics like slit lamp, ophthalmoscope and retinoscope, etc. They also learnt techniques for preparation of laser machines like Yag laser and Argon laser, and also how to set up a phacoemulsification machine for cataract surgery. One of the candidates indicated that the training would have been more effective if they had been allowed to service and repair some of the equipment themselves rather than just observing the procedures.

The biomedical technician at NIO&H, after availing the training, has now started working independently, whereas previously he was doing it under supervision. There is a concern with career progression as there is no ophthalmic biomedical technician training in Bangladesh. The Bangladesh Service Commission requires a Bachelors in Science or a Diploma in Engineering for any appointment. One of the candidates interviewed is currently deployed as an Instrument Caretaker and unless he improves his qualification, he has no chances for career development. It would be useful to explore this further with the National Skills Development Council<sup>10</sup> and the Bangladesh Technical Education Board<sup>11</sup> and determine whether any existing technology training programmes have the potential to incorporate a module on servicing and maintenance of eye care equipment as this would build sustainable local capacities in this field. The biomedical technicians trained under this project are not providing any preventive maintenance support to district eye units.

As part of the project, two national documents were developed – National Paediatric Eye Care Guidelines and National Paediatric Eye Care Protocol. These documents are in the draft stage and undergoing a review by NEC and NIO&H before they are endorsed and adopted as national resource documents.

One of the objectives was to improve the health management information system at NIO&H for paediatric ophthalmology. A private specialist in information technology was commissioned to develop a data entry

<sup>10</sup> <http://nsdc.gov.bd/>

<sup>11</sup> <http://www.bteb.gov.bd/>

module for paediatric ophthalmology. The specialist has developed an Oracle based system (front end and back end) with terminal based user entry. It is a web-based application with reporting links directly available to Sightsavers. The paediatric ophthalmology module is currently in the training phase. The system has a potential for incorporating additional modules in the future for other specialty services at NIO&H. Although the system has been developed and operationalised, the uptake of data entry is likely to be gradual, unless the NIO&H management prioritises its implementation. Sightsavers and NIO&H are exploring how adoption of the MIS by end-users may be improved.

Based on interviews, the evaluation team found that the one month observership training in paediatric ophthalmology may have been more useful to someone who has undergone a full 18 months of subspecialty training. Furthermore, at the time the project was developed, this subspecialty training did not exist in Bangladesh.

The schoolteachers were trained in primary eye care while the need in school eye health is more on vision screening and eye health promotion. Furthermore, a large number of CHWs were trained in primary eye care. However, there was no system to provide continuing mentoring support in eye health in primary health care to CHWs and teachers, which could have been addressed by training master trainers in respective departments. The trainings were delivered by the district eye surgeons and project staff.

The evaluation team noted that there were some operational gaps. For instance, there were very limited services available for low vision<sup>12</sup> care and there were no orthoptists<sup>13</sup>. Both are essential for a comprehensive paediatric ophthalmology subspecialty service.

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<sup>12</sup> Low vision care is required for those individuals who have difficulty in executing a task despite surgery and/or optical correction of their refractive error. This requires specialised care and is usually provided by optometrists. A few days orientation in low vision may not be adequate to deliver a low vision service without the necessary technical competency

<sup>13</sup> An Orthoptist is a specialised cadre that assesses squints, manages amblyopia (lazy eye) in children, and assists the paediatric ophthalmologist in management and post-operative review of children/adults operated for squints

## Conclusions

The project has achieved an impressive achievement of targets. Short-term trainings of various cadres like ophthalmologists, technicians, nurses and mid-level ophthalmic personnel in paediatric eye care relevant to their level of competency were carried out. A large workforce of CHWs and teachers were trained as well in primary eye care, while a very useful precedence was set in orientation of other specialist health professionals like obstetricians, paediatricians and neonatologists in paediatric eye care issues.

However, short-term training abroad was more observership rather than hands-on which would have enhanced effectiveness.

## Learning

- To the extent possible, efforts should be made to strengthen existing locally-based training programmes, or where they do not exist but are required, capacity building should be undertaken to develop local human resources and ensure their accreditation with relevant authorities.

## Recommendations

- Appropriate human resources to deliver paediatric ophthalmic services should be developed according to an overarching national strategy, being mindful of accreditation, deployment and career development pathways, and feasibility for institutionalising training programmes should be kept foremost
- Consideration needs to be given to developing cadres to deliver low vision and orthoptic services. This may require a national consultation with other non-project stakeholders to formulate a unified national strategy for developing human resources in these areas



This was a training focussed project and as such it was not related to service delivery outputs. This was partly dictated by the fact that all training abroad was on observership basis and therefore difficult to quantify in terms of outputs and outcomes at individual level. Except for CHWs and teachers who were in a large enough number, the other cadres were too few to determine efficiency.

The training overseas was constrained by administrative matters like obtaining visas, delays in securing a training position etc. Furthermore, a training need assessment was not done beforehand to determine the knowledge and skill gap that needed to be filled, but rather candidates were sent to regular calendared courses, which may be useful, but not necessarily what is required for the candidates. This is an area where Sightsavers had to rely on National Eye Care and the NIO&H as nominations were provided by them based on their assessment of needs of the trainees. It was not clear how the non-clinical and support services training were to be utilised in paediatric ophthalmic services. There was no curriculum and competency framework for the various short-term trainings.

The project had multiple partnerships for training and awareness raising. These partnerships ranged from tertiary, secondary to primary levels of care. The partnerships were managed well considering that some of the issues were beyond the control of the project like visas, nomination of trainees, training positions, postings and transfers. This affected project timelines and performance in certain areas e.g. the medical officer at Upazilla Health Complex Tungipura is attending a training which means that eye care services at the hospital are non-functional until his return.

The rationale to develop or strengthen district eye services for childhood eye surgery was unclear. There is generally no anaesthesia service for eye care at district level, and the major workload of the district eye unit revolves around general ophthalmology. The development of child eye health services at district level could have focused on identification of children with eye problems, correction of refractive errors, treatment of minor eye ailments, and refer others to subspecialty services at tertiary hospitals. The training of CHWs and schoolteachers was more focussed on primary eye care. The training of CHWs could be aligned with the ten key messages on child eye health<sup>14, 15</sup>, while training of teachers could be aligned with WHO school screening guidelines and endorsed by relevant authorities.

There was partial strengthening of the referral pathway with increased uptake of services (this is discussed further under impact). The CHWs referred children to the district eye unit and Upazilla Health Complex, where the district ophthalmologist treated children above 10 years of age, and referred those less than 10 years to NIO&H due to lack of anaesthesia services and also because they did not have the necessary knowledge, skills and competencies required to deliver subspecialist services.

During the course of the project, it was learnt that Orbis (an international non-government organisation also working in child eye health) was also developing paediatric ophthalmology guidelines and protocols. Sightsavers approached Orbis on this issue and both agreed to develop joint protocols and guidelines. The documents once approved will serve as national resource documents and quality standards for paediatric ophthalmic services.

A national guideline and protocol for childhood cataract had been developed in 2010<sup>16</sup>. Unfortunately, this document was not well disseminated and none, including the programme manager who led the massive Bangladesh Childhood Cataract Campaign, were aware of its existence. Had this information been available, it may have saved time and effort to develop new guidelines for cataract as part of the new paediatric

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<sup>14</sup> A five year project for the prevention of childhood blindness. Report of a WHO consultation, 2002.WHO/PBL/02.88.

<sup>15</sup> Arvind Chandna and Clare Gilbert. When your eye patient is a child. *Community Eye Health*. Mar 2010; 23(72): 1–3

<sup>16</sup> Clare Gilbert, Mohammad Muhit, P Vijayalakshmi. Cataract in children in Asia. Detection, management and programme planning. Asian Childhood Cataract Special Interest Group, 2010



ophthalmology guidelines and protocols. The project attempted to develop guidelines and protocols for paediatric ophthalmology, while the earlier document had only focussed on childhood cataract. This is not an issue with the project design or implementation, but rather a higher level management issue for NEC to address fragmentation, coordinate and promote partner coalition synergies and provide strategic direction for development of paediatric ophthalmic services (please see section on Sustainability).

## Conclusions

It was difficult to judge the efficiency or cost-effectiveness of short-term trainings, when firstly the numbers were few and secondly the trainings abroad were mostly observerships. However, anecdotal evidence has demonstrated that there was an increase in outpatients and number of surgeries. While it is difficult to attribute this to the short-term trainings alone, the combined effect of orienting district ophthalmologists in paediatric eye care, improving the soft skills of nurses and mid-level ophthalmic personnel, and training CHWs and teachers in primary eye care has had a cumulative effect on the delivery of paediatric ophthalmic services.

However, this has also raised issues on the usefulness and timing of short-term observership trainings, the requirement for training needs assessment and competency frameworks to guide capacity development, and rationalising the type of child eye health services at district level in light of the competencies and what district ophthalmologists can realistically deliver.

## Learning

- One of the key challenges observed is the fragmented approach to development of paediatric ophthalmic services by various stakeholders and organisations (government, NGOs, INGOs, private institutes etc), with the result that there is risk of duplication of effort. There is a pressing need for a stewardship mechanism to guide future development of the subspecialty of paediatric ophthalmology and coordinate the efforts of stakeholders and organisations so that they are mutually reinforcing and not competitive or duplicative

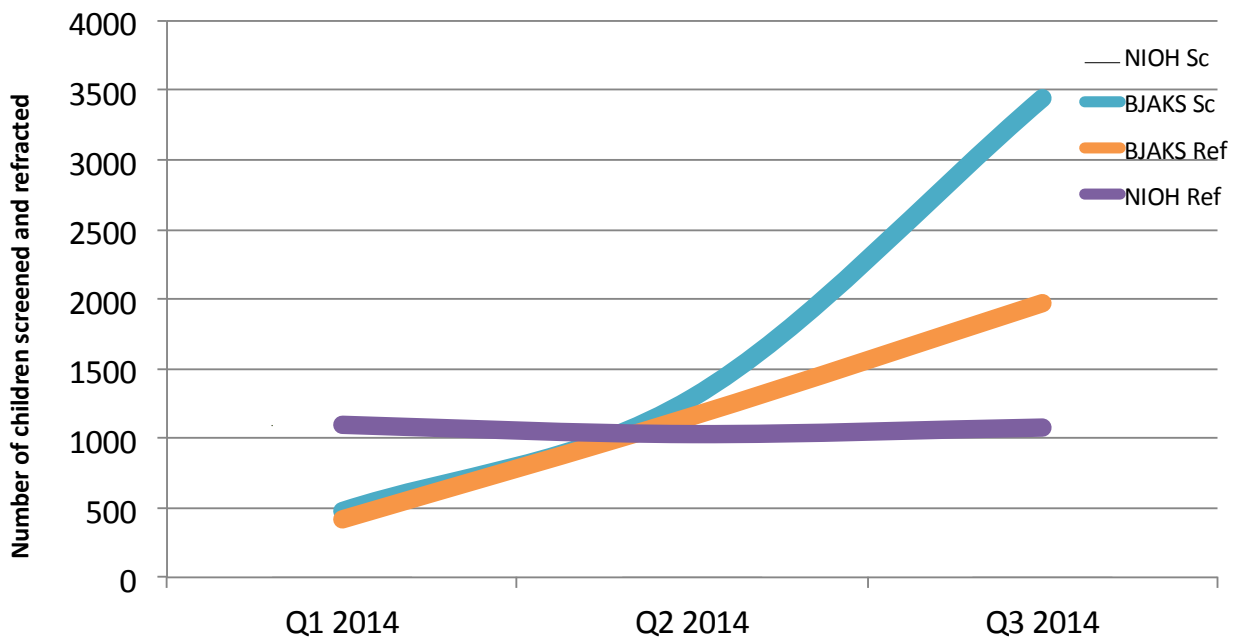
## Recommendations

- Minimum standards of service delivery of child eye health services should be defined for district health care, so that district ophthalmologists and their teams can be oriented in a package of child eye health care appropriate to the minimum standards and their knowledge and skills developed for improved refraction in children

The evaluation team noted several short-term impacts either directly related to or inspired by the project.

Firstly, there was an increase in children screened and refracted (Fig 3). BJAKS demonstrated a significant increase in both screenings and refractions, however, the change at NIO&H was negligible and this may be related more to their focus on subspecialty care at the centre of excellence.

**Figure 3 - Children screened and refracted**

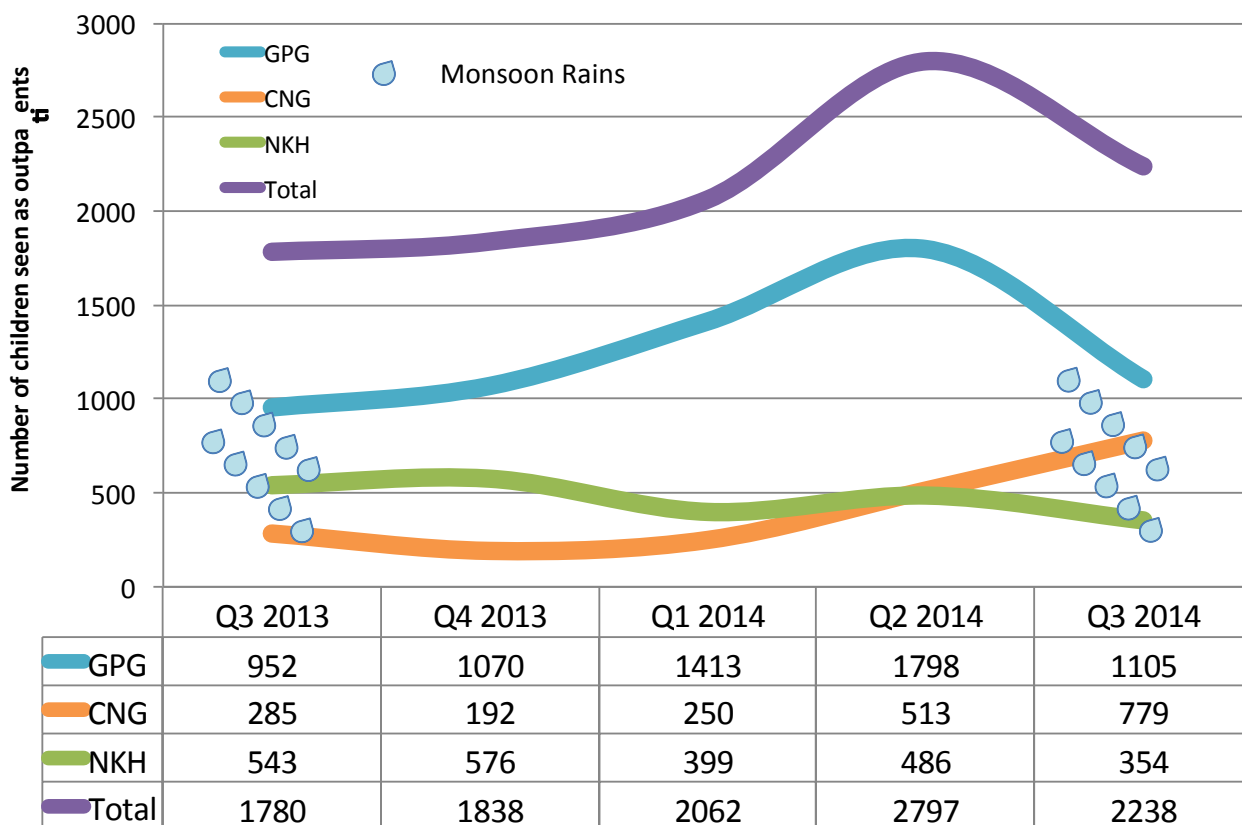


Key: Sc – screened; ref - refracted

Secondly, there was a marked increase in paediatric outpatient attendances at the eye clinics in Gopalganj and Chapainawabganj (Fig 4). However, there was not much difference observed at Noakhali. Gopalganj demonstrated a 68% increase between Q4 2013 and Q2 2014, while Chapainawabganj demonstrated an impressive 167% increase during the same period. The overall total increase was 52% in three quarters. Year on year, there was a 16% increase in paediatric patients in Q3 in 2013 and 2014. Bangladesh has a heavy season of monsoon rains and floods during the June to September months and usually results in lowered patient attendance at hospitals.

This data suggests that the training of CHWs coupled with short-term training of the district eye care teams helped mobilise uptake of services.

**Figure 4 - District trends of paediatric outpatients**



Key: GPG – Gopalganj; CNG – Chapainawabganj; NKH - Noakhali

A recent study has shown that the prevalence of severe visual impairment and blindness may have been reduced to about 0.5 per 1000 children by the active Bangladesh childhood cataract campaign and multitude of efforts to develop paediatric ophthalmic services<sup>17</sup>. This indicates that there are some very positive trends for child eye health that future initiatives can build on.

One of the key impacts of the project was the initiation of the long-term subspecialty fellowship training in paediatric ophthalmology at NIO&H. This constitutes good practice and is the first time a long-term subspecialty training programme has been launched in any health discipline in Bangladesh. Two candidates (including one from this project) have been enrolled in the first course.

Furthermore, existing staff have benefitted from the training and this has improved their professional career development. For instance, general nurses were trained for subspecialty care, and a health assistant was trained as a refractionist.

There were broader systemic impacts as well. A protocol and guidelines for paediatric ophthalmology have been developed and will become national resource documents. The referral pathway from CHWs to district ophthalmologist has indicated the potential for identification of children with eye health needs. A long-term subspecialty training programme has been initiated locally and will serve as the precedence for other subspecialty trainings. This 18 months programme has received the endorsement of the

<sup>17</sup> Gudlavalleti V S Murthy, Islay Mactaggart, Muhit Mohammad, Johurul Islam, Christiane Noe, Aynul Islam Khan, Allen Foster. Assessing the prevalence of sensory and motor impairments in childhood in Bangladesh using key informants. ADC Online First, published on July 8, 2014 as 10.1136/archdischild-2014-305937 accessed on 14 December 2014

Ophthalmological Society of Bangladesh, NEC, Bangabandhu Sheikh Mujib Medical University and the Bangladesh Medical and Dental Council.

Partner capacities were also strengthened. For instance, NIO&H now has capacity for long-term subspecialty training, while its management reporting has been strengthened through the health management information system. The operation theatre for paediatric ophthalmology at NIO&H used to function 1-1.5 days a week. After the project, the theatre is now functioning 3 days a week.

At the district level, the Civil Surgeon was motivated by the project as this led to increased awareness and identification of children with eye problems, and therefore supported the training of CHWs and teachers in primary eye care. The Civil Surgeon indicated his willingness to institutionalize primary eye care training for CHWs and schoolteachers. The training of CHWs and schoolteachers can have some additional benefits. For example, if training of teachers in vision screening is streamlined, they can become a good resource in school eye health; if mentoring support is provided to CHWs, they can also become good source of health awareness and health promotion for child eye health.

Coordination generally worked well as there was direct implementation by NIO&H, but postings and transfers were beyond their control. Coordination with Orbis as a non-project stakeholder was very limited and this led to duplication of effort initially e.g. development of protocols and guidelines, health information system for paediatric ophthalmology. However, when Sightsavers learnt that Orbis was working on something similar, Sightsavers approached Orbis and both agreed to jointly develop the documents.

## Conclusions

There was an increase in children screened and refracted. BJKS demonstrated a significant increase in both screenings and refractions. There was also a marked increase in paediatric outpatient attendances at the eye clinics in Gopalganj and Chapainawabganj. However, there was not much difference observed at Noakhali. Gopalganj demonstrated a 68% increase between Q4 2013 and Q2 2014, while Chapainawabganj demonstrated an impressive 167% increase during the same period. The overall total increase was 52% in three quarters. One of the key impacts of the project was the initiation of the long-term subspecialty fellowship training in paediatric ophthalmology at NIO&H. A protocol and guidelines for paediatric ophthalmology have been developed and will become national resource documents. The referral pathway from CHWs to district ophthalmologist has indicated the potential for identification of children with eye health needs.

## Learning

- Small projects have the potential to act as catalysts to leverage not only short-term service delivery impact but also broader institutional change. The challenge in project design is to identify the programmatic elements that will act as catalysts and therefore view them as springboards e.g. engagement with Civil Surgeons to cascade primary eye care training; recognising that district eye units have a critical role to play in childhood refraction; and capacitating a national centre of excellence for long-term subspecialty training
- As a critical mass of health professionals trained or oriented in paediatric eye care has not yet been developed, linking service delivery outputs with training programmes is premature at this stage

## Recommendations

- Based on learning from this project, consideration needs to be given to developing an integrated child eye health approach in a pilot district that derives synergy from primary health care, child health initiatives, school health, community awareness, establishes the scope and competencies required for district level child eye health services, strengthens referral pathways to tertiary services, and builds on existing governance structures for health, education and child rights

Sustainability, both as a process and as an outcome, needs to be viewed not only from the project lens but also from the operating environment lens.

The project has led to some areas that can be considered as lasting changes. For instance, the long-term paediatric ophthalmology subspecialty fellowship training programme at a government centre of excellence will likely continue well into the future and produce a stream of competent paediatric ophthalmologists to meet the future needs of the country. Such training capacities and opportunities did not exist before in the public sector in Bangladesh.

The development of a protocol and guideline for paediatric ophthalmology will help establish national standards for the subspecialty services. The project has made a strategic entry point for school and community eye health in the districts and needs to be explored further to take advantage of gains made through engagement with the Civil Surgeons.

The health management information system developed for the paediatric ophthalmology department at NIO&H can be used to incorporate additional modules for other departments and therefore over time develop a comprehensive health information system at the hospital and institute.

The technical capacities developed at NIO&H shall ensure its continuity as a resource centre, while government support for functional and operational activities at NIO&H and district eye units shall ensure financial sustainability. The knowledge and skill imparted by the project continues beyond the project life.

One of the key benefits that were made possible as a result of the project was its service delivery impact. Although the project did not cater for any intraocular lenses for cataract surgery, Sightsavers made its own contribution to the implementing partners to provide costs of lenses required in childhood cataract surgery to further enhance the impact of the project. However, there may be a challenge in continuing to provide free lenses in the future.

At the level of the operating environment, the project needs to be viewed in the entirety of a long term historical perspective to understand the course of development of paediatric ophthalmic services in Bangladesh and where this project fits in a larger whole. Indeed, the project is one of many catalytic steps, some large and some small, that have taken place over a 15 years time horizon.

Figure 5 encapsulates the chronology of main events and illustrates how there has been a stepwise development of paediatric ophthalmic services in Bangladesh. The development of these services has been mainly driven by international NGOs like Sightsavers and Orbis and one large national NGO, Child Sight Foundation. While most paediatric ophthalmic services have been developed in NGO hospitals, there has been little investment in tertiary government hospitals except mainly NIO&H.

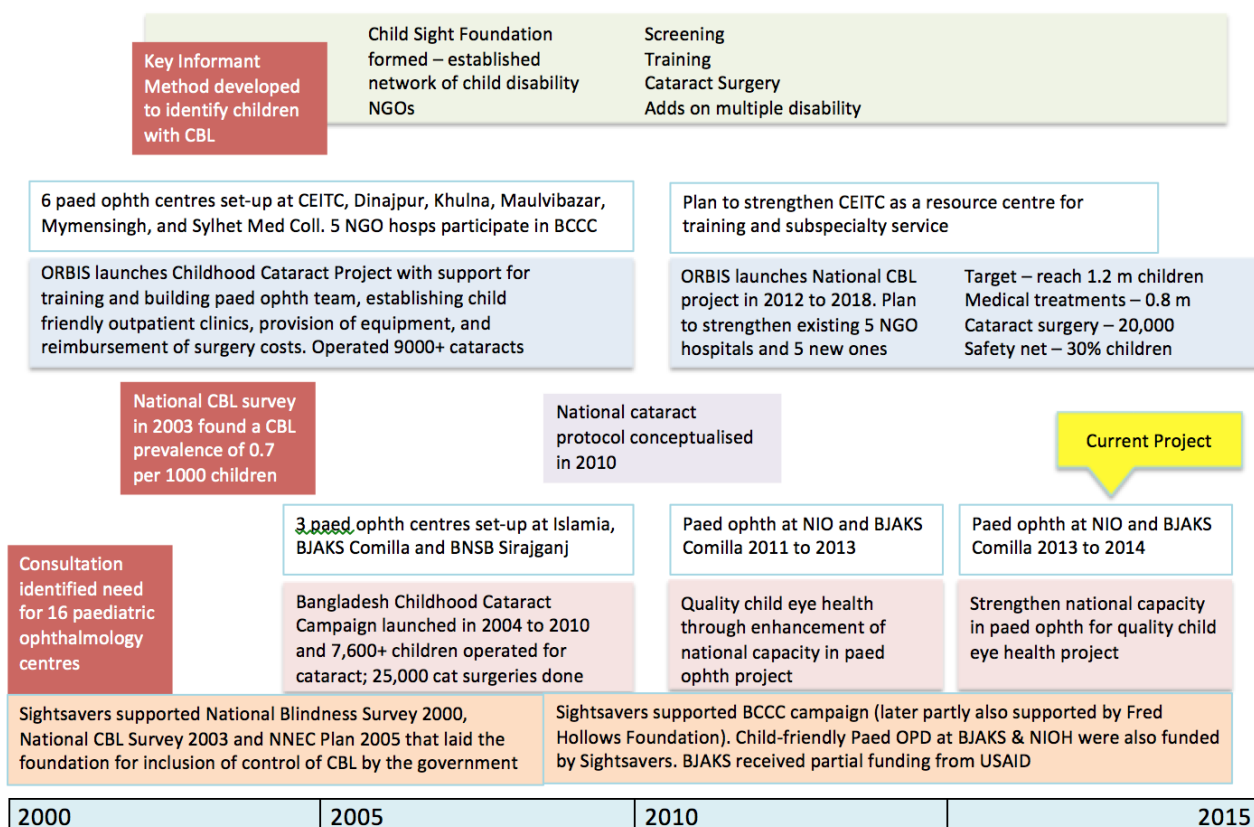
At the outset, a national planning meeting took place and a strategy was developed in 2003 for systematic development of paediatric ophthalmic services. In the last five years following the ending of the Bangladesh Childhood Cataract Campaign, there is a renewed intensity of investment in child eye health by international NGOs, but it is fragmented. It is progressing in the absence of a stewardship mechanism to guide strategic direction and there is lack of a revised child eye health strategy aligned with national needs.

One example of this is in training of paediatric ophthalmologists. An Association of Paediatric Ophthalmologists and Strabismologists has been formed and has 33 members. Of these, only 3 have received long-term fellowship training of 12 – 18 months. All the others have been trained through short-term, often observerships, and are now delivering a subspecialty function. Earlier in the development phase, this may have been a necessary compromise considering that control of childhood cataract was run in a

campaign mode, but short-term trainings as a stop-gap arrangement for subspecialty development can no longer be justified as international standards for subspecialties now demand long term fellowships<sup>18</sup>.

One of the urgent needs is the formulation of a revised and updated strategy and action plan for child eye health that incorporates a plan for development of paediatric ophthalmic services and supporting human resources that meet competency requirements for the subspecialty. Establishment of paediatric ophthalmic services at tertiary teaching hospitals in the government sector could conceivably be one of the priorities.

**Figure 5 - Chronology of development of paediatric ophthalmic services**



<sup>18</sup> WH Chan, H Saedon and MG Falcon. Postgraduate ophthalmic training: how do we compare? Eye (2011) 25, 965–967



## Conclusions

The project has led to some areas that can be considered as lasting changes. For instance, the long-term paediatric ophthalmology subspecialty fellowship training programme at a government centre of excellence will likely continue well into the future and produce a stream of competent paediatric ophthalmologists to meet the future needs of the country. Such training capacities and opportunities did not exist before in the public sector in Bangladesh.

The development of a protocol and guideline for paediatric ophthalmology will help establish national standards for the subspecialty services. The project has made a strategic entry point for school and community eye health in the districts and needs to be explored further to take advantage of gains made through engagement with the Civil Surgeons.

In the last five years following the ending of the Bangladesh Childhood Cataract Campaign, there is a renewed intensity of investment in child eye health by international NGOs, but it is fragmented. It is progressing in the absence of a stewardship mechanism to guide strategic direction and there is lack of a revised child eye health strategy aligned with national needs.

## Learning

- Use 2015 to take stock of achievements and challenges in development of paediatric ophthalmic services, conduct a situation analysis of existing services and human resources, and determine gaps. There is need for a national consultation process to develop a new and forward looking strategy and action plan (strategic plan) for child eye health with short, medium and long term strategic actions

## Recommendations

- The governance structure and stewardship for paediatric ophthalmology needs to be strengthened, and one possible way might be to set up Task Forces under the auspices of NEC. These Task Forces, with membership from the professional association of paediatric ophthalmologists and strabismologists, national and international NGOs and training institutions, jointly formulate a coordination mechanism, articulate minimum standards for subspecialty services and develop a national strategic plan for child eye health. Future partnership support by NGOs and international partners should be directed towards achieving the various components of the strategic plan for child eye health



The project has demonstrated several points of synergy, some of which have been discussed in earlier sections. Of particular note are the linkages developed with obstetricians, paediatricians and neonatologists and this is an area that needs to be nurtured further to enhance overall awareness about child eye health.

The training of teachers and CHWs complimented each other as both were part of the local communities and therefore more effective in awareness raising and referrals. The knowledge and skill gained by them through the project would continue beyond the project life.

However, some contradictions were also noted, especially in the training of nurses and mid-level ophthalmic personnel at district level. The issue of subspecialty services at district level has been discussed in an earlier section. The needs for child eye health need to be determined first at district level, and staff trainings and continuing professional development developed to meet those needs.

The coordination mechanism with other non-project stakeholders could be improved and new learning embedded in project design. For instance, Orbis has been piloting the use of mobile phone technology to increase uptake of follow-ups. A digital system has been established at a partner hospital that sends a text message to the patient or care-giver four days and one day before the scheduled follow-up date. They have found that this has increased follow-up rates significantly. Furthermore, Orbis has just completed a national GIS web-based mapping of eye care services and plans to launch the results early next year. It has also simultaneously been working on a health management information system for paediatric ophthalmology for its projects. This further reinforces the point made earlier about fragmentation and duplication of effort.

An association of paediatric ophthalmologists and strabismologists has recently been established in Bangladesh. This represents a professional forum for the subspecialty. It is envisaged that they would also be involved in formulating national standards and best practice guidelines. The association is at an early stage and would require support for strengthening its coordination and collaboration with other professional forums and organisations.

## Conclusions

The project has demonstrated several points of synergy. Of particular note are the linkages developed with obstetricians, paediatricians and neonatologists and this is an area that needs to be nurtured further to enhance overall awareness about child eye health.

The training of teachers and CHWs were complimentary to each other as both were part of the local communities and therefore more effective in awareness raising and referrals.

## Learning

- One of the main challenges of implementing a short-term project is how it has been contextualised and positioned. As a project on its own, it may have discrete activities and outputs that are project bound. However, when positioned in a larger scenario, its leverage potential can be envisaged and therefore designed for greater effect. It is vital to identify who are the key project and non-project stakeholders at the outset so that top-down, bottom-up and horizontal coordination pathways are established early on in the project.

## Recommendations

- Administrative and technical support needs to be extended to the fledgling Association of Paediatric Ophthalmologists and Strabismologists. This may be in the form of time bound support to establish a secretariat and hold periodic national conferences and symposia. Development of linkages and building technical competencies can be enhanced by regular support to attend and participate in international meetings like those held by the American Association for Paediatric Ophthalmology and Strabismus<sup>19</sup>

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<sup>19</sup> <http://www.aapos.org/>

Several components of the project demonstrate the potential for scalability.

The subspecialty fellowship training programme launched recently at NIO&H will scale up production of paediatric ophthalmologists and can also introduce orientation and training of teams to support establishment of paediatric ophthalmology departments.

Further engagement with the Civil Surgeon and Director General Health Services can help institutionalise primary eye care training of CHWs, while similar interaction with Ministry of Education would be required to train master trainers for school eye health.

The role of nurses and mid-level ophthalmic personnel needs to be revisited in the context of district eye care services. Training district ophthalmologists and district eye care teams in a service delivery package of essential child eye health can be scaled up to all districts.

The project has had some unintended benefits that have the potential for scalability. The team at NIO&H used the project to advocate the significance of child eye health and its synergies with child health to the Line Director Mother and Child Health (MCH) programme. The Line Director MCH is also Director of IMCI (Integrated Management of Childhood Illnesses) and the EPI (Expanded Programme for Immunisation) programme. Discussions are underway for a possibility to incorporate child eye health in IMCI programme and for training of EPI workers for child eye health promotion at least in the project districts.

The Ministry for Health has recently launched a 'Little Doctor' programme:

*From May 2011, a new 'Little Doctors' initiative was launched to engage the senior pupils of primary-level schools for peer education for soil transmitted helminths control and developing healthy personal hygiene practice. There are about 82,000 primary-level schools in Bangladesh, with about 20 million pupils. Eighteen senior pupils (viz. from Class IV and V) of each school are selected as 'Little Doctors', divided in six groups—one group for one class and are engaged in self-motivated practice of healthy habits and educating other pupils to practise the same. The 'Little Doctors' initiative aims at creating 1.23 million little doctors each year with a view to making the programme sustainable. It is assumed that adoption by even a small percentage of the 20 million children or the little doctors for healthy lifestyle throughout their lives will have a huge positive impact on future health of the nation. There is a guideline for selection, orientation, and functioning of little doctors. Adapted from Health Bulletin 2014, Management Information System, Directorate General of Health Services, Ministry of Health and Family Welfare*

Discussions are underway with NEC to integrate vision screening in the Little Doctors programme.

## Conclusions

Although it is early to claim a scaling up in the post-project period, there are some potential options for scalability. For instance, subspecialty fellowship training at NIO&H, training of CHWs in primary eye care and teachers in vision screening can be taken to scale. More recently, the Little Doctors programme of the Ministry of Health provides an invaluable opportunity to integrate vision screening in their programme and reach 20 million children in 82,000 primary schools.

## Learning

- There are numerous government initiatives for various aspects of child health. Periodic interaction and engagement with various child health programmes helps to identify possible entry points and opens up opportunities for collaboration e.g. IMCI and Little Doctors programmes.

## Recommendations

- Every effort should be made to derive maximum synergy from the Little Doctors programme as it provides immediate access to universal child eye health promotion amongst children and can help institutionalise vision screening by children

## IV. SUMMARY CONCLUSIONS

The evaluation revealed that the project has met most targets or even exceeded some. One commendable achievement was the orientation of other medical specialists in child eye health, a practice that should be further developed in the future.

The project is well aligned with the Childhood Blindness Study 2003, Child Rights, Global Action Plan for Universal Eye Health 2014-2019, MDGs and health, NEC plan, UNCRPD article 25 on health, Vision 2020 – The Right to Sight and the WHO Health Systems framework. The project has also aligned itself with an emerging eye health problem in children, retinopathy of prematurity and has oriented obstetricians, paediatricians and neonatologists on its prevention and timely treatment.

The project has achieved an impressive achievement of targets. Short-term trainings of various cadres like ophthalmologists, technicians, nurses and mid-level ophthalmic personnel in paediatric eye care relevant to their level of competency were carried out. A large workforce of CHWs and teachers were trained as well in primary eye care, while a very useful precedence was set in orientation of other specialist health professionals like obstetricians, paediatricians and neonatologists in paediatric eye care issues.

However, short-term training abroad was more observership rather than hands-on which would have enhanced effectiveness.

It is difficult to judge the efficiency or cost-effectiveness of trainings, when first the numbers are few and secondly the trainings were mostly observerships. However, anecdotal evidence has demonstrated that there was an increase in outpatients and number of surgeries. While it is difficult to attribute this to the short-term trainings alone, the combined effect of orienting district ophthalmologists in paediatric eye care, improving the soft skills of nurses and mid-level ophthalmic personnel, and training CHWs and teachers in primary eye care has had a cumulative effect on the delivery of paediatric ophthalmic services.

However, this has also raised issues on the usefulness and timing of short-term observership trainings, the requirement for training needs assessment and competency frameworks to guide capacity development, and rationalising the type of child eye health services at district level in light of the competencies and what district ophthalmologists can realistically deliver.

There was an increase in children screened and refracted. BJAKS demonstrated a significant increase in both screenings and refractions. There was also a marked increase in paediatric outpatient attendances at the eye clinics in Gopalganj and Chapainawabganj. However, there was not much difference observed at Noakhali. Gopalganj demonstrated a 68% increase between Q4 2013 and Q2 2014, while Chapainawabganj demonstrated an impressive 167% increase during the same period. The overall total increase was 52% in three quarters. One of the key impacts of the project was the initiation of the long-term subspecialty fellowship training in paediatric ophthalmology at NIO&H. A protocol and guidelines for paediatric ophthalmology have been developed and will become national resource documents. The referral pathway from CHWs to district ophthalmologist has indicated the potential for identification of children with eye health needs.

The project has led to some areas that can be considered as lasting changes. For instance, the long-term paediatric ophthalmology subspecialty fellowship training programme at a government centre of excellence will likely continue well into the future and produce a stream of competent paediatric ophthalmologists to meet the future needs of the country. Such training capacities and opportunities did not exist before in the public sector in Bangladesh.

The development of a protocol and guideline for paediatric ophthalmology will help establish national standards for the subspecialty services. The project has made a strategic entry point for school and community eye health in the districts and needs to be explored further to take advantage of gains made through engagement with the Civil Surgeons.

In the last five years following the ending of the Bangladesh Childhood Cataract Campaign, there is a renewed intensity of investment in child eye health by international NGOs, but it is fragmented. It is progressing in the absence of a stewardship mechanism to guide strategic direction and there is lack of a revised child eye health strategy aligned with national needs.

The project has demonstrated several points of synergy. Of particular note are the linkages developed with obstetricians, paediatricians and neonatologists and this is an area that needs to be nurtured further to enhance overall awareness about child eye health.

The training of teachers and CHWs were complimentary to each other as both were part of the local communities and therefore more effective in awareness raising and referrals.

Although it is early to claim a scaling up in the post-project period, there are some potential options for scalability, for instance, subspecialty fellowship training at NIO&H, training of CHWs in primary eye care and teachers in vision screening can be taken to scale. More recently, the Little Doctors programme of the Ministry of Health provides an invaluable opportunity to integrate vision screening in their programme and reach 20 million children in 82,000 primary schools.

## V. LEARNING

Childhood blindness is not just a medical condition and needs to be contextualised within the broader areas of child rights, education, social inclusion, gender and equity. These areas are sometimes beyond the scope of clinically oriented projects, but by orienting different service providers and specialist health professionals in child eye health, intra- and inter-sectoral collaboration can be improved to reduce exclusion.

To the extent possible, efforts should be made to strengthen existing locally-based training programmes, or where they do not exist but are required, capacity building should be undertaken to develop local human resources and ensure their accreditation with relevant authorities.

One of the key challenges observed is the fragmented approach to development of paediatric ophthalmic services by various stakeholders and organisations (government, NGOs, INGOs, private institutes etc), with the result that there is risk of duplication of effort. There is a pressing need for a stewardship mechanism to guide future development of the subspecialty of paediatric ophthalmology and coordinate the efforts of stakeholders and organisations so that they are mutually reinforcing and not competitive or duplicative.

Small projects have the potential to act as catalysts to leverage not only short-term service delivery impact but also broader institutional change. The challenge in project design is to identify the programmatic elements that will act as catalysts and therefore view them as springboards e.g. engagement with Civil Surgeons to cascade primary eye care training; recognising that district eye units have a critical role to play in childhood refraction; and capacitating a national centre of excellence for long-term subspecialty training.

As a critical mass of health professionals trained or oriented in paediatric eye care has not yet been developed, linking service delivery outputs with training programmes is premature at this stage.

Use 2015 to take stock of achievements and challenges in development of paediatric ophthalmic services, conduct a situation analysis of existing services and human resources, and determine gaps. There is need for a national consultation process to develop a new and forward looking strategy and action plan (strategic plan) for child eye health with short, medium and long-term strategic actions.

One of the main challenges of implementing a short-term project is how it has been contextualised and positioned. As a project on its own, it may have discrete activities and outputs that are project bound. However, when positioned in a larger scenario, its leverage potential can be envisaged and therefore designed for greater effect. It is vital to identify who are the key project and non-project stakeholders at the outset so that top-down, bottom-up and horizontal coordination pathways are established early on in the project.

There are numerous government initiatives for various aspects of child health. Periodic interaction and engagement with various child health programmes helps to identify possible entry points and opens up opportunities for collaboration e.g. IMCI and Little Doctors programmes.



## VI. RECOMMENDATIONS

### For National Eye Care

1. Foster networking between the Bangladesh Association of Paediatric Ophthalmologists and Strabismologists, Bangladesh Paediatric Association and Bangladesh Society of Neonatal and Paediatric Intensive Care to identify joint areas for priority action and develop relevant practice guidelines relating to cross-cutting issues of child eye health
2. Appropriate human resources to deliver paediatric ophthalmic services should be developed according to an overarching national strategy, being mindful of accreditation, deployment and career development pathways, and feasibility for institutionalising training programmes should be kept foremost
3. Consideration needs to be given to developing cadres to deliver low vision and orthoptic services. This may require a national consultation with other non-project stakeholders to formulate a unified national strategy for developing human resources in these areas.
4. Minimum standards of service delivery of child eye health services should be defined for district health care, so that district ophthalmologists and their teams can be oriented in a package of child eye health care appropriate to the minimum standards and their knowledge and skills developed for improved refraction in children
5. The governance structure and stewardship for paediatric ophthalmology needs to be strengthened, and one possible way might be to set up Task Forces under the auspices of NEC. These Task Forces, with membership from the professional association of paediatric ophthalmologists and strabismologists, national and international NGOs and training institutions, jointly formulate a coordination mechanism, articulate minimum standards for subspecialty services and develop a national strategic plan for child eye health. Future partnership support by NGOs and international partners should be directed towards achieving the various components of the strategic plan for child eye health

### For Sightsavers

1. Based on learning from this project, consideration needs to be given to developing an integrated child eye health approach in a pilot district that derives synergy from primary health care, child health initiatives, school health, community awareness, establishes the scope and competencies required for district level child eye health services, strengthens referral pathways to tertiary services, and builds on existing governance structures for health, education and child rights.
2. Administrative and technical support needs to be extended to the fledgling Association of Paediatric Ophthalmologists and Strabismologists. This may be in the form of time bound support to establish a secretariat and hold periodic national conferences and symposia. Development of linkages and building technical competencies can be enhanced by regular support to attend and participate in international meetings like those held by the American Association for Paediatric Ophthalmology and Strabismus.
3. Every effort should be made to derive maximum synergy from the Little Doctors programme as it provides immediate access to universal child eye health promotion amongst children and can help institutionalise vision screening by children.

# REFERENCES

A five year project for the prevention of childhood blindness. Report of a WHO consultation, 2002.WHO/PBL/02.88

A. S. M. Nawshad Uddin Ahmed, Humaira Muslima, Kazi Shabbir Anwar, Naila Z. Khan, M. A. K. Azad Chowdhury, Samir K. Saha, and Gary L. Darmstadt. Retinopathy of Prematurity in Bangladeshi Neonates. *Journal of Tropical Pediatrics* 2008, Vol. 54, No. 5:333-339

Arvind Chandna and Clare Gilbert. When your eye patient is a child. *Community Eye Health*. Mar 2010; 23(72): 1–3

Bangladesh Childhood Cataract Campaign – Strategic Evaluation. 2010

Bangladesh Demographic and Health Survey 2011

Clare Gilbert, Mohammad Muhit, P Vijayalakshmi. Cataract in children in Asia. Detection, management and programme planning. Asian Childhood Cataract Special Interest Group, 2010

Gudlavalleti V S Murthy, Islay Mactaggart, Muhit Mohammad, Johurul Islam, Christiane Noe, Aynul Islam Khan, Allen Foster. Assessing the prevalence of sensory and motor impairments in childhood in Bangladesh using key informants. *ADC Online First*, published on July 8, 2014 as 10.1136/archdischild-2014-305937 accessed on 14 December 2014

Hon Justice M Imman Ali, Justice at the Appellate Division of the Supreme Court of Bangladesh. The Children Act 2013 – Brief Commentary

Human Development Report 2013

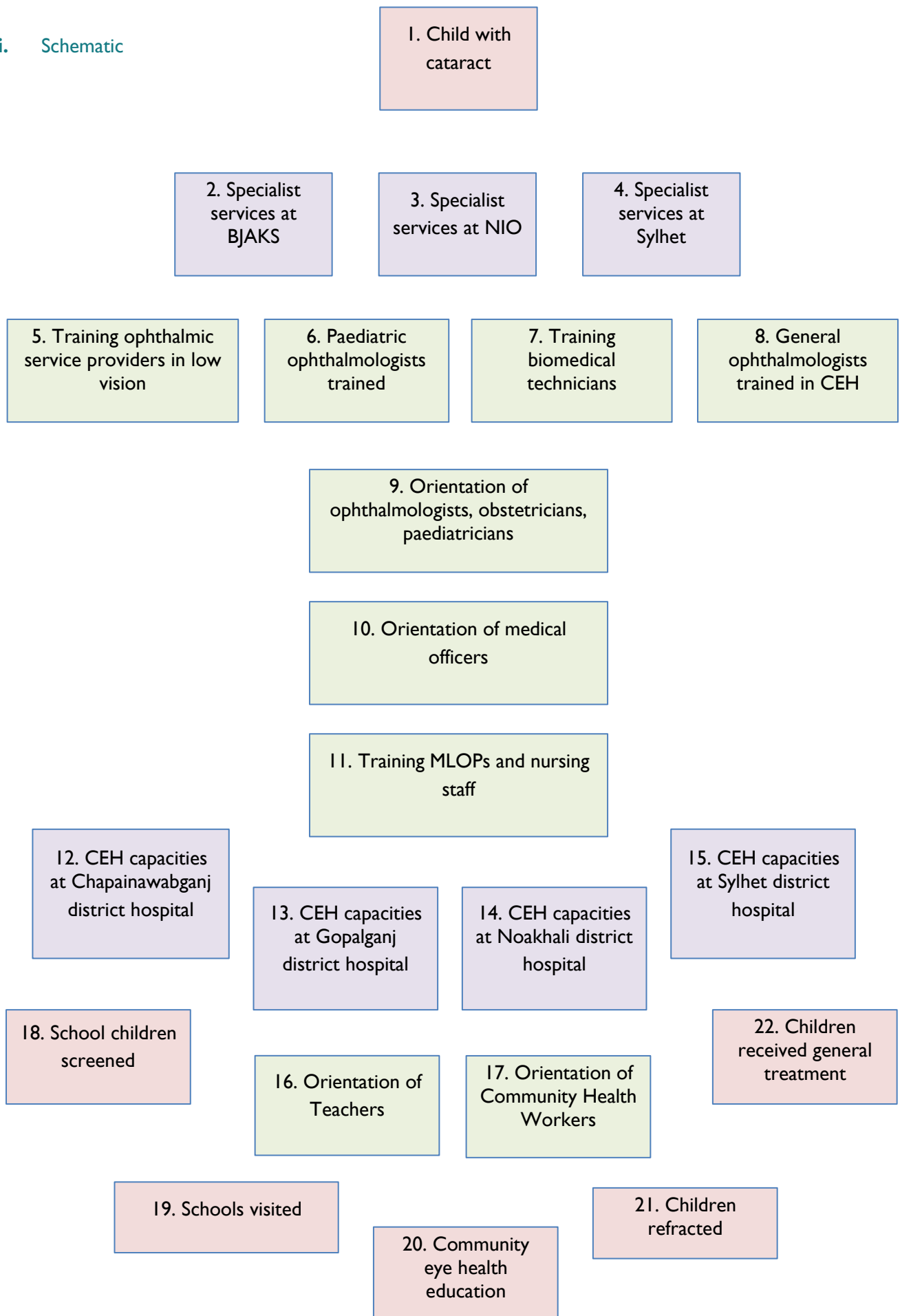
M A Muhit, S P Shah, and C E Gilbert, A Foster. Causes of severe visual impairment and blindness in Bangladesh: a study of 1935 children. *Br J Ophthalmol*. Aug 2007; 91(8): 1000–1004

Report on Review of Quality Child Eye Health in Bangladesh through Enhancement of National Capacity in Paediatric Ophthalmology. Ark Foundation, 2013

Universal eye health: a global action plan 2014-2019. World Health Organization 2013

WH Chan, H Saedon and MG Falcon. Postgraduate ophthalmic training: how do we compare? *Eye* (2011) 25, 965–967

vii. Schematic



viii. Appendix I – Evaluation Matrix and Indicators

**Relevance**

<b>Main evaluation question</b>	<b>Indicator</b>	<b>Data Source</b>	<b>Data collection method</b>	<b>Sampling</b>	<b>Method of Data Analysis</b>
How aligned is the project to local, national and international development priorities and policies?	Alignment of project outputs against check-list of national and international development priorities and policies	Project documents	Document review Interview		Tabulation Thematic analysis
To what extent are Sightsavers and the Government through this project responding to the needs and priorities of the constituencies they work in?	Alignment of project outputs against check-list of national and international development priorities and policies	Project documents	Document review Interview		Tabulation Thematic analysis

## Effectiveness

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
How effectively are trained staff organising individual functions and competently supporting cases?	Project performance of key outputs against intended targets	Project documents	Document review Observation		Narrative
If and how effectively are hospitals managing an increased volume of patients referred to/ walk-in-patients for services?	Project performance of key outputs against intended targets by key partners	Project deliverers	Observation Interview		Narrative
How has the project delivered against the planned targets and what factors (if any) have contributed / hampered this? What were the various approaches tried? Which ones did not work? Why? What was the learning?	Project performance of referral statistics	Project documents Project deliverers	Document review Observation		Narrative

## Efficiency/Cost-Effectiveness

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
How well has the project been implemented?	Percentage implementation targets achieved	Project documents	Document review		Tabulation
How efficient is the referral chain at different levels? What interventions were undertaken to contribute to the improvement of the referral chain by the project? What are the gaps?	Project performance of key outputs against intended targets Referral pathway statistics	Project documents	Document review Interview Observation		Narrative

## Impact

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
Has the delivery of project outputs and activities led to the desired outcomes? Have there been any unintended / additional outcomes? (checked against summary M&E matrix, and M&E reporting tool)	Percentage of key outputs / outcomes that are on track	Project documents	Document review Observation		Tabulation
What are the main changes produced by the programme, positive or negative and what are the key factors behind these changes in the life of the beneficiaries, and the participating hospitals?	Key project activities and their outcomes	Project documents Project deliverers	Document review Interview Project deliverers workshop		Tabulation Thematic analysis
What are the broader systemic changes brought about by the intervention, directly or indirectly that will lead to improvement of the overall Health systems?	Key project outcomes against checklist of health systems	Project documents Project deliverers	Interview Document review		Thematic analysis
What changes (if any) are evident in the capacity of the partner hospitals and nationally? Will they be able to continue the same	Views of stakeholders about project	Project deliverers	Interview Project deliverers workshop		Thematic analysis

beyond the project duration and geography?					
What are the perception of the service recipients or parents/ local authorities/ government of the project and its impact?	Views of stakeholders about project Views of local authorities about project	Project beneficiaries Persons with knowledge of project recipients	Interview Project deliverers workshop		Thematic analysis
How effective was the coordination between partners / stakeholders? How has this increased the service delivery efficiency? Any gaps?	Views of stakeholders about project Views of local authorities about project	Project beneficiaries Persons with knowledge of project recipients	Interview Project deliverers workshop		Thematic analysis



## Sustainability

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
What are the key lasting changes achieved by this intervention as an overall programme in relation to the Vision 2020 milestones and health systems strengthening agenda?	Key project outcomes against checklist of Vision 2020 and health systems	Project deliverers	Document review Interviews		Thematic analysis
To what extent is the project intervention likely to be technically, financially and programmatically sustainable? What are the key factors that ensures (or will ensure) sustainability of the programme beyond Sightsavers support?	Viability trends of key activities after training	Project documents	Document review Observation Interviews		Tabulation

## Coherence/Coordination

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
To what extent has the intervention systemically created synergies with other institutions, towards achieving the defined objectives and goals over time?	Examples of synergies and coordination with stakeholders	Project documents Project deliverers	Document review Interview		Tabulation Thematic analysis
To what extent did the programme objectives, approaches and design complement and/or contradict each other?	Consistency between project objectives, outputs and activities	Project documents Project deliverers	Document review Interview		Tabulation Thematic analysis
How did the project engage the community in its intervention? Is there a system developed to maintain such engagement beyond the project period? What else could be done to improve coordination and how?	Examples of synergies and coordination with stakeholders	Project documents Project deliverers	Document review Focus groups Project deliverers workshop		Tabulation Thematic analysis

## Scalability/Replicability

Main evaluation question	Indicator	Data Source	Data collection method	Sampling	Method of Data Analysis
Is any aspect of the programme or its components likely to be scaled or replicated by participating partners, other agencies or government? How likely is this to occur or what conditions need to exist for this to happen? What factors or constraints might inhibit this process?	Key project activities internalized or scaled up by local, provincial and national institutions	Project deliverers	Interview		Thematic analysis
What evidence has been generated by the project to support scalability efforts by interested parties? How has the project packaged and shared this evidence to date?	Project activities aligned with sectoral strategies (e.g. health, education, disability etc)	Project documents	Document review		Tabulation
In the event of a scale-up, what lessons learnt from the implementation process in this context need to be taken into account?	Key project activities internalized or not adopted by local, provincial and national institutions	Project deliverers	Interview		Thematic analysis

ix. Appendix 2 – Data Collection

<b>Data Sources</b>	<b>Data Collection Methods</b>	<b>Justification</b>
<b>Sightsavers Country Office</b>	Semi-structured Interview	Qualitative information and validation
<b>Implementing partners</b>	Semi-structured Interview Workshop	Qualitative information and validation
<b>Paediatric ophthalmologists and biomedical technicians</b>	Semi-structured Interview	Qualitative information and validation
<b>District ophthalmologist and partners etc</b>	Workshop	Qualitative information and validation
<b>School administrators, teachers and students, communities</b>	Semi-structured Interview Focus Group Discussions	Qualitative information and validation
<b>Primary Health Care (PHC) workers and Community members (if available) in project areas who have benefited from the project</b>	Semi-structured Interview Focus Group Discussions	Qualitative information and validation

x. Appendix 3 – List of Persons Met

**List of Partners Visited:**

1. Gopalganj District Hospital
2. National Institute of Ophthalmology and Hospital
3. National Eye Care
4. Voluntary Association for Rural Development

**List of Officials:**

1. Prof Deen Mohammad Noorul Huq – Director General Health Services
2. Dr Sirajul Islam – Civil Surgeon Gopalganj
3. Mr Pavitro Kumar Kundo – Medical Superintendent Upazilla Health Complex Tungipura
4. Ms Bijali Rani Paik – Senior Staff Nurse Upazilla Health Complex Tungipura
5. Dr Mohammad Shirazul Islam – District Eye Consultant Gopalganj
6. Dr Nesar Ahmad – District Eye Consultant Gopalganj
7. Prof Dr Jalal Ahmed – Line Director National Eye Care, and Director National Institute of Ophthalmology and Hospital
8. Prof Enayet Hossain – Head Department of Paediatric Ophthalmology, National Institute of Ophthalmology and Hospital
9. Dr Alamgir Hossain – Director Planning and Development, Ispahani Islamia Eye Institute and Hospital
10. Mr Amranul Hoque Kamal – Founder and Executive Director, Voluntary Association for Rural Development
11. Dr Zeenat Rehana Shipu – candidate who attended paediatric ophthalmology training
12. Dr Mohammad Ashiqur Rehman - candidate who attended paediatric ophthalmology training
13. Mr Jalaluddin – Instrument Caretaker, National Institute of Ophthalmology and Hospital

xi. Appendix 4 – Interview Questions

**Interviews of Partners (NIO and NEC)**

What criteria did you use to identify persons for subspecialty training and biomedical training (qualification, experience, knowledge)?  
How will trained staff be retained after the project?  
How did your organization benefit from this project? Capacities, resources, systems?  
To what extent has the project delivered against the planned objectives and outputs and what factors (if any) have contributed/hindered this?  
Were there any unexpected delays or any unintended outcomes? How did the organization respond to these?  
How was quality monitored and assured for the various training related programme activities?  
How do envisage subspecialty training for paediatric ophthalmic services in the future?  
In your view, how has this project impacted on childhood blindness in the country?  
What kind of social protection mechanisms are in place to cater for cataract surgery in children from vulnerable communities?  
How does this project fit with the national eye health plan and primary health care?  
What in your opinion are the main learnings of this project? How will these be integrated in the scaling up of paediatric ophthalmology in the country as part of the new national eye health plan?

**Interviews of Paediatric Ophthalmologists**

How was your experience regarding the training in paediatric ophthalmology? What could have been strengthened to achieve a better learning outcome?  
After attending the training, what kind of services are you rendering? Please share some examples – what is different now; what has changed?  
What are your future plans?  
How can subspecialty training in paediatric ophthalmology be strengthened in Bangladesh?  
How can orientation of general ophthalmologists in child eye health be strengthened in Bangladesh?  
What is the scope of your current interaction with obstetricians, paediatricians, neonatologists, etc?

**Interviews of Biomedical Technicians**

How was your experience regarding the training in biomedical technology? What could have been strengthened to achieve a better learning outcome?  
After attending the training, what kind of services are you rendering? Please share some examples – what is different now; what has changed?  
What are your future plans?  
How can training in equipment maintenance and biomedical technology be strengthened in Bangladesh?  
What is the scope of your current technical support to district level eye units?

**FGDs with School Teachers**

What training did you receive for eye health screening in schools?  
Were you satisfied with the training? If not, why and what steps should be taken to improve it?  
Where were children with VI referred for further check up?  
What kind of support was provided by teachers to the VI students in classrooms?

**FGDs with PHC workers**

How do you identify children with visual impairment in the community?  
How can the system of identification be improved or strengthened?  
Do you refer the cases, and if so, where?  
What kind of counseling is provided to families with VI children?

How has the training impacted in your work?  
What changes should be made in the training of child eye health?  
Any other suggestions?

### **Questions for Sightsavers**

How aligned is the child eye health project to Sightsavers strategic direction as set out in its Strategic Framework (2009 – 2013, and extended 2013 – 2018) and Bangladesh development priorities and policies and VISION 2020?

Were there any unexpected delays or any unintended outcomes? How did the organization respond to these?

How was quality monitored and assured for the various training related programme activities?

What in your opinion are the main learnings of this project? How will these be integrated in the scaling up of paediatric ophthalmology in the country as part of the new national eye health plan?

With regards to human resource development for paediatric ophthalmic services, what need has been addressed and what gaps remain? What are your future priorities and how do you plan to address these?

What kind of social protection mechanisms are in place to cater for cataract surgery in children from vulnerable communities?

xii. Appendix 5 – Work Plan

	WO 20/10	WO 27/10	WO 3/11	WO 17/11	WO 24/11	WO 1/12	WO 8/12	WO 15/12	WO 22/12	WO 29/12	WO 5/1
<b>Inception Phase</b>											
Document Review											
Consult Sightsavers											
Preparing Draft Methodology											
Draft Inception Report		X									
Comments from Sightsavers			X								
<b>Output 1: Final Inception Report</b>			X								
<b>Data Collection and Field Visits Phase</b>											
Interviews in selected sites											
Field visit to selected sites											
<b>Data Analysis and Report Writing Phase</b>											
Systematize and analyze data											
Draft Evaluation Report							X				
Comments from Sightsavers								X			
<b>Output 2: Final Evaluation Report</b>										X	



**Title: End Term Evaluation/ of the project “Strengthen National Capacities on Paediatric Ophthalmology for Quality Child Eye Health in Bangladesh (APC-GM-0010)”**

Sightsavers is an international development agency and its overall goal is to contribute to the achievement of the MDGs by eliminating avoidable blindness, and promoting equality of opportunity for disabled people. Currently, Sightsavers is supporting projects in 34 countries across Africa, Asia and the Caribbean. In Bangladesh, Sightsavers has been working since 1973. Sightsavers interventions are focused in three thematic areas, which are health, education and social inclusion. Sightsavers has been working in the field of childhood blindness in Bangladesh since 2004 following a childhood blindness study carried out by International Centre for Eye Health (ICEH) in 2003 commissioned by Sightsavers. This study found that 67% of childhood blindness in Bangladesh is either preventable or treatable.

**I. Background:**

In July 2013 Sightsavers was awarded a grant by the United States Agency for International Development (USAID) through the JSI Research & Training Institute, Inc. to implement the project “Strengthen National Capacities on Paediatric Ophthalmology for Quality Child Eye Health in Bangladesh (APC-GM-0010)” (*hereafter referred to as ‘the project’*). The total project budget is USD 157,719 for the period of July, 2013 to December, 2014.

The project has a focus on strengthening the national capacity of paediatric ophthalmology in collaboration with the National Eye Care (NEC) and National Institute of Ophthalmology & Hospital (NIO&H), Bangladesh Jatiya Andha Kalyan Somiti (BJAKS) and Sylhet M.A.G. Osmani Medical College & Hospital (SOMC).<sup>20</sup>The project builds on the learning from previous and ongoing Sightsavers’ interventions, such as the Bangladesh Childhood Cataract Campaign (2004 – 2010), Combating Childhood Blindness project (July 2011 to December 2014) and the Quality Child Eye Health in Bangladesh through Enhancement of National Capacity in Paediatric Ophthalmology project (Nov 2011 – May 2013 funded by WL/USAID). The decision to implement this project was reached following a series of consultations with key partners, particularly NIO&H, NEC and BJAKS, and in context of previous project.

**I.2 Geographic location:** Dhaka, Comilla, Chapainawabganj, Gopalganj, Noakhali and Sylhet

**I.3 Characteristics of intended beneficiaries:** Primary beneficiaries are paediatric ophthalmologists nominated by partner(s), ophthalmologists/gynaecologists/ obstetricians/paediatricians, other mid-level ophthalmic professionals, technologists, government health workers and school teachers (in selected areas/ districts). The secondary beneficiaries would be paediatric ophthalmologists as well as children with blinding eye conditions across the country, who are expected to have increased access and information on quality paediatric eye care services in selected facilities.

**I.4 Key areas of intervention as per the call for proposal: #1:** Training and capacity building of human resources (medical and non-medical personnel).

**Goal:** Training and capacity building of human resources (medical and non-medical personnel).

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<sup>20</sup> The project could not work with SOMC due to transfer of its sole paediatric ophthalmologist to another duty station.

**Intended Results (Purpose):**

- NIO&H, SOMC and BJAKS have increased capacity to handle childhood blindness and cascade down knowledge to new professionals.
- District hospitals in Chapainawabganj, Gopalganj, Noakhali, and Sylhet have increased capacities to identify and refer children in need of eye services.
- An efficient referral chain established from community clinics to tertiary-level hospitals for childhood eye care services.

**Specific Objectives:**

- Targeted ophthalmic team acquired enhanced skills through training
- Quality clinical services available and eye MIS developed on paediatric eye care as part of system strengthening
- The referral chain for childhood eye health services expanded and strengthened

**2. Purpose of Evaluation**

The purpose of this evaluation is to review the achievement of the project against objectives and outputs as detailed in the project document, as well as assess the long-term effects made by the project on eye health, particularly focusing on paediatric eye health. The key issues to be addressed are institutional and overall programmatic development at the partners' level, contribution to health system strengthening and contribution made at the beneficiary level as well as financial management of the project.

**2.1 evaluation criteria****2.1.1 Relevance:**

Assess the appropriateness of the application of the project design

- a) How aligned is the project to local, national and international development priorities and policies?
- b) To what extent are Sightsavers and the Government through this project responding to the needs and priorities of the constituencies they work in?

**2.1.2 Effectiveness:**

Assess the partners' capacity as a result of training and capacity enhancement (including capacity development and its application, improving access, quality of care – both clinical and patient satisfaction, demand generation etc.):

- c) How effectively are trained staff organising individual functions and competently supporting cases?
- d) If and how effectively are hospitals managing an increased volume of patients referred to/ walk-in-patients for services?
- e) How has the project delivered against the planned targets and what factors (if any) have contributed/hampered this? What were the various approaches tried? Which ones did not work? Why? What was the learning?

**2.1.3 Efficiency:**

- f) How well has the project been implemented?
- g) How efficient is the referral chain at different levels? What interventions were undertaken to contribute to improve the referral chain by the project? What are the gaps?

#### **2.1.4 Impact/Results**

- h) Has the delivery of project outputs and activities led to the desired outcomes? Have there been any unintended/additional outcomes? (checked against summary M&E matrix, p. B-10 of the contract and M&E reporting tool as approved by JSI)
- i) What are the main changes produced by the programme, positive or negative and what are the key factors behind these changes in the life of the beneficiaries, and the participating hospitals?
- j) What are the broader systemic changes brought about by the intervention, directly or indirectly that will lead to improvement of the overall Health systems?
- k) What changes (if any) are evident in the capacity of the partner hospitals and nationally? Will they be able to continue the same beyond the project duration and geography?
- l) What are the perception of the service recipients or parents/ local authorities/ government of the project and its impact?
- m) How effective was the coordination between partners/ stakeholders? How this has increased the service delivery efficiency? What are the gaps?

#### **2.1.5 Sustainability:**

- n) What are the key lasting changes achieved by this intervention as an overall programme in relations to the Vision 2020 milestones and health systems strengthening agenda?
- o) To what extent is the project intervention likely to be technically, financially and programmatically sustainable? What are the key factors that ensures (or will ensure) sustainability of the programme beyond Sightsavers support?

#### **2.1.6 Scalability/Replication:**

- p) Is any aspect of the programme or its components likely to be scaled or replicated participating partners, other agencies or government? How likely is this to occur or what conditions need to exist for this to happen? What factors or constraints might inhibit this process?
- q) What evidence has been generated by the project to support scalability efforts by interested parties? How has the project packaged and shared this evidence to date?
- r) In the event of a scale-up, what lessons learnt from the implementation process in this context need to be taken into account?

#### **2.1.7 Coherence/Coordination:**

- s) To what extent has the intervention systemically created synergies with other institutions, towards achieving the defined objectives and goals over time?
- t) To what extent did the programme objectives, approaches and design complement and/or contradict each other?
- u) How did the project engage the community in its intervention? Is there a system developed to maintain such engagement beyond the project period? What else could be done to improve coordination and how?

### **3. The Evaluators**

The evaluator/evaluation team will have demonstrated competence in having undertaken similar work before, including experience in programme design and management, planning, monitoring and evaluation and cost-effectiveness.

Sightsavers will select an individual external consultant or consulting firm to undertake the consultancy on a competitive basis.

The consultant/consultancy firms, role will include validation of strategic information, issuing of relevant directives or endorsement of necessary proposals during the course of the exercise and coordination of

local logistics. The evaluator/evaluation team will work closely with an evaluation/review working group consisting of the following:

- A technical expert from National Eye Care
- Sightsavers Programme Development Advisor Eye Health & Health Systems Strengthening (Asia)
- Sightsavers Institutional Funding Manager South Asia, Sightsavers
- Representatives from NIO&H and Sightsavers, Bangladesh Country Office

#### 4. Methodology

The team should detail their approach and methodologies to be used in the ToR in their Expression of Interest application. These may include qualitative and quantitative tools as appropriate to conduct this evaluation.

The evaluator/evaluation team is responsible for developing the evaluation framework and methodology that addresses the key evaluation questions. The evaluator/evaluation team will define an appropriate sample size and specify to Sightsavers what mechanisms will be adopted to avoid selection bias. The evaluation should meet the principles of participation involving both male and female beneficiaries.

**As a minimum, the evaluation will include the following key steps:**

- **Review** relevant secondary document (including project and organizational documents)
- Consultants will take part in a **briefing** with Sightsavers Bangladesh Country Office (BCO), Paediatric unit of NIO&H and National Eye Care (NEC) in Dhaka
- Development and application of **appropriate data collection tools** (e.g. questionnaire schedules and tools, interview checklists and focus group templates) for interviews and discussions with stakeholders including the project implementers, donors, service recipients and other actors in the eye care delivery system.
- **Visit** hospital partners, Civil Surgeons, District Sadar hospital, Community Clinics, selected school(s), and meet beneficiaries
- **Visit** NIO&H Paediatric unit and observe
- Undertake **interviews** of the personnel/cadres trained by the project
- **Interviews/focus groups** with project implementers, partners, donors, other relevant actors in the sector and service recipients/beneficiaries. The evaluation should seek a representative sample of service recipients from relevant groups, e.g. served children and their guardians.
- The team leader will hold **debriefing session** for partners of the Project at the end of the field work period.
- **Analysis and report writing.**

#### 5. Reference Material

- a) Project Description (2013)
- b) Approved M&E reporting tool (2013/14)
- c) Project Funding Agreement and Memorandum of Understanding with Partners
- d) Periodical progress reports to JSI/USAID
- e) WHO Health System Building Blocks
- f) National Eye Care Plan 2005 and the latest draft (2014)
- g) National Operational Plan (Annual)
- h) Summary Report of the National Blindness & Low Vision Survey 2000
- i) Sightsavers strategic framework 2009 - 2018

- j) Latest Sightsavers SIM Card Primary Eye Care Training report (latest), other documents developed by the project
- k) Visibility plan 2013/14
- l) Participant list for different in country and outside trainings under the project
- m) Nursing staff training report (2013)
- n) School teachers orientation report on PEC (latest)
- o) Record kept at NIO&H on the Paediatric unit
- p) HMIS developed/installed at the NIO&H Paediatric Unit by the project
- q) Evaluation reports of previous projects (2010; 2013)

## 6. Timeframe

The duration of the assignment will be approximately 18 working days and the evaluation team will be expected to demonstrate through their expression of interest indicative timeframes for undertaking the key activities. The start date of the evaluation field work will be no later than **1 October, 2014**.

A completed draft report is expected [please refer to 'key deliverables' for deadlines]. The final report with other required documentations must be submitted [please refer to 'key deliverables' for deadlines].

The evaluation will follow the key phases:

### **Phase I - Desk study: Review of documentation and elaboration of field Study [4.5 days]**

The evaluator/s will review relevant documentation from section 5 above (Reference material). Based on this review, they will produce an inception report which will include an elaborated plan, methodology and sampling strategy of the data collection for this study. The evaluation will only proceed to the next stage upon approval of this inception report. An appropriate inception report format will be made available to the team.

### **Phase II: Field Data Collection [7.5days]**

This phase of the review will seek to collect primary data on the key review questions explained under evaluation criteria and verify. The team will use the agreed plan, methodology and sampling strategy; and complete round up meetings with key stakeholders.

### **Phase III – Data analysis and production of evaluation report [6days]**

The team will draw out key issues in relation to evaluation questions and produce a comprehensive report. This analysis should draw on the wider issues in the development sector and particularly what has happened because of the JSI/USAID funding that wouldn't have happened otherwise and to what extent does the use of funding represent value for money.

*The table below summarizes the key activities outlined above*

<b>Phase</b>	<b>Activity</b>	<b>No of Days</b>
<b>Phase I – Desk study: Review of documentation and elaboration of field Study</b>	Desk research/ literature Review	1.5 days
	Inception Report	1.5 days
	Revision of collection methods and tools based on feedback on the inception report	1.5 day
<b>Phase II: Field Data Collection</b>	Field Visits & Data-collection	7.5 days
<b>Phase III – Analysis and production of evaluation report</b>	Debriefing (In-country)	0.5 day
	Data analysis and preparation of draft report	4 days
	Review of draft report from feedback and preparation	1.5 day

Phase	Activity	No of Days
	of final report, data sets and summary presentation	
<b>Total</b>		<b>18 days</b>

## 7. Deliverables: The minimum expected outputs are:

- An Inception report, produced by no later than **07/10/2014**
- A draft evaluation report produced by no later than **07/11/2014**
- At least 7 case studies with photos of primary and secondary beneficiaries linked with the project with signed consent form along with the final report
- A final evaluation report produced by **30/11/2014**
- Data sets (SPSS, Excel, Word) – for all collected data (quantitative). The data sets should be in an appropriate format (SPSS, Excel, Word) and will be submitted together with or as part of the final evaluation report by **30/11/2014**
- A final PowerPoint presentation, summarizing the key findings from the evaluation submitted together with the final evaluation report by **30/11/2014**.

### 7.1 INCEPTION REPORT

The inception report should be available to Sightsavers within five working days of project commencement. Feedback will be provided within seven days following acknowledged receipt of inception report.

The purpose of this report is to ensure that the evaluator/s covers the most crucial elements of the exercise including the appropriateness and robust methodology to be employed. The inception report provides the organisation and the evaluator/s with an opportunity to verify that they share the same understanding about the evaluation and clarify any misunderstanding at the outset. The report should reflect the team's review of literature and the gaps that the field work will fill.

**Field work will only commence once this inception report has been reviewed and agreed with the designated representatives of the stakeholders.**

### 7.2 DRAFT REPORT

A draft report (not more than 40 pages including executive summary and excluding annexes) should be submitted to Sightsavers by **07/11/2014**. The report should provide an inventory of equipment, tools and HR training (if any) provided and lessons learned. Sightsavers will provide feedback on the draft version to the evaluation team within 2 weeks after acknowledged receipt of the draft report.

### 7.3 FINAL REPORT

The Final Report will be submitted to Sightsavers on **30/11/2014**. Findings and recommendations from the Final Report will be used to inform future decisions.

### 7.4 DATA SETS

The evaluation team will be expected to submit complete data sets (in Access/ Excel/Word) of all the quantitative data as well as the original transcribed qualitative data gathered during the exercise. These data sets should be provided at the time of submission of the final report.

## **7.5 SUMMARY FINDINGS**

On submission of the final report, the team is expected to submit a PowerPoint presentation (**maximum 12 slides**), summarizing the methodology, challenges faced, key findings under each of the evaluation criteria and main recommendations.

## **8. Reporting Format**

Detailed guidelines on how to structure the evaluation report will be provided to the evaluation team prior to commencement of the activity, and reporting templates will be provided which the team should use for the Inception report and the Evaluation Report.

**Please note that penalties up to 10% of agreed fees will be imposed for noncompliance with the requirements 7.1 to 7.4 and reporting format provided.**

## **9. Administrative/Logistical support**

### **9.1 BUDGET**

The consultant should submit to Sightsavers an Expression of Interest indicating their daily rates for the assignment. Sightsavers will assess Expression of Interests submitted according to standardized quality assessment criteria, as well as on the basis of their competitiveness and value for money in line with the budget available for this evaluation. The daily fees proposed by the applicant should exclude expenses such as:

- Economy class airfares and visas. (where applicable)
- In-country transportation
- Hotel accommodation (bed, breakfast and even meals taken at the place of accommodation)
- Stationery and supplies
- Meeting venue hire and associated equipment e.g. projectors

Sightsavers usually cover the above costs, unless otherwise stated. The consultant/team is expected to cover all other costs and materials not mentioned above related to this exercise as part of their daily fees or equipment (e.g. laptops).

### **9.2 SCHEDULE OF PAYMENT**

The following payment schedule will be adhered to:

- On signing the contract: 20%
- On submission of draft report: 40%
- On acceptance and approval of final report: 40%

### **9.3 MODE OF PAYMENT**

As agreed by Sightsavers and the consultant



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