

# VIETNAM URBAN CHILDHOOD BLINDNESS PREVENTION PROJECT Final evaluation Report

December 2012

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# **Acronyms and Abbreviations**

CHW	Commune Health Worker*
FHF	The Fred Hollows Foundation
HCMC	Ho Chi Minh City
HCMC EH	Ho Chi Minh City Eye Hospital
HEH	Hanoi Eye Hospital
IEC	Information, Education and Communication
MOH	Ministry of Health
PBL	Prevention of Blindness
PEC	Primary eye care
PMB	Project Management Board
SCB	Standard Chartered Bank
RA	Refractive Error
RAAB	Rapid Assessment of Avoidable Blindness
VA**	Visual Acuity
VNIO	Vietnam National Institute of Ophthalmology
WHO	World Health Organization

#### Notes:

\*The administrative level below district is the 'commune' in rural areas and 'ward' in urban areas. As the project covers both urban and rural areas within Hanoi and Ho Chi Minh City, the work 'commune' will reflect both communes and wards in this report.

\*\*The system of assessing visual acuity in Vietnam differs from most other countries, and is rated on a scale of 1-10/10 (Monoyer scale). 10/10 on the Monoyer scale is equivalent to 6/6m; 7/10 is approximately equivalent to 6/9.5; 5/10 is equivalent to 6/12; and 3/10 is equivalent to 6/24. A detailed list providing equivalent ratings to the 6m Snellen scale is provided at Appendix 8.

# Glossary

#### Amblyopia (also known as lazy eye)

A condition when one eye has poorer vision than the other. If amblyopia is left untreated, a child's vision will not develop correctly. Amblyopia can be a secondary condition of strabismus.

Ptosis

Drooping or falling of the upper or lower eyelid.

Strabismus (also known as squint)

Misalignment of the two eyes which prevents proper binocular vision.

#### Synoptophore

An instrument for diagnosing imbalance of eye muscles and treating them by orthoptic methods.

# Acknowledgements

The members of the evaluation team were Ms Nguyen Thi Huong (FHF Project Manager), Ms Ngo Thi Phuong Anh (FHF Senior Project Officer – Hanoi), Mr Le Quang Tram Tinh (FHF Project Officer - HCMC), Dr Nguyen Chi Dung (Assistant Professor, Vice Director of the Centre of Training and Community, VNIO), and Ms Marita Hefler (independent external consultant).

The team gratefully acknowledges the Standard Chartered Bank (SCB) for funding this project through the 'Seeing is Believing' Initiative, and allocating sufficient resources for effective evaluation. In particular, we wish to acknowledge the participation and involvement of SCB staff in project activities, and their commitment to reducing avoidable blindness in Vietnam. We would also like to thank SCB Vietnam CEO Mr Louis Taylor for providing valuable input to this evaluation.

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The team also wishes to thank the school staff, teachers and nurses, parents and students at the five schools visited during the evaluation, as well as the district and commune health services, each of whom enthusiastically shared their knowledge and experiences of the project.

# **Executive Summary**

The Urban Childhood Blindness Prevention Project was developed and implemented in partnership with Hanoi Eye Hospital and Ho Chi Minh City Eye Hospital, and is funded by Standard Chartered Bank through the global 'Seeing is Believing' project.

This evaluation was conducted in November/December 2012 over a total period of 13 days. Site visits and evaluation team discussions were held from 12 to 18 November. The evaluation was conducted by a team of two external consultants and three FHF Vietnam staff.

The project purpose is to strengthen the delivery of high quality, affordable, accessible eye care services for children aged 0-15 across 14 districts in Hanoi and 6 districts in Ho Chi Minh City.

The evaluation was undertaken to assess the project results against the intended objectives, potential outcomes and likely impact, and its contribution to the overall Vietnam National Prevention of Blindness plan, especially the reduction of avoidable childhood blindness in Hanoi and Ho Chi Minh City. The project objectives and comments about the overall extent to which these have been achieved are summarised below:

Ob	jective	Comments
<ol> <li>To strengthen the capacity of eye health providers at the tertiary, secondary and primary levels to effectively diagnose and treat childhood-related eye conditions, with a focus on refractive error (RE)</li> </ol>		The target outputs for this objective were exceeded, with additional outputs achieved through budget savings in other areas. The evaluation team found the capacity of eye care providers has been considerably strengthened, and most staff who received training through the project are continuing to use their skills. Services in most cases appear to be of a high standard. Demand for services has increased, particularly at the primary and tertiary level.
2.	To improve child eye care treatment infrastructure in Hanoi and HCMC through provision of essential equipment.	Equipment provided to Hanoi Eye Hospital is being fully utilized and is further increasing demand for services. Equipment provided at the district and commune level is appropriate, and is generally being well utilized.
3.	To reduce the burden of blindness and improve eye health in children through screening, referral and treatment.	Outputs for this component were generally met or exceeded. Screening and and referral networks are functioning well. Linkages and coordination between the health and education system appear to have been significantly strengthened.
4.	To undertake research in project areas to inform and evaluate activities	The operational research was relevant to the needs of project partners, and findings were used to inform, and where necessary adjust project activities. Project partners reported the information was new, and in some cases unexpected, and will inform planning for future activities.
5.	To increase awareness and knowledge of childhood- related eye care among local communities and government authorities through eye health education and advocacy.	Project activities were undertaken at both a national and local level. Project beneficiaries demonstrated a high level of knowledge and awareness of childhood blindness and refractive error. Impact was observed at both an individual and institutional level.

Other relevant finding are summarized as follows:

#### Sustainability

The project appears to have achieved a high level of sustainability. It has closely followed the principles to achieve sustainability as outlined in the original project proposal, particularly consultation with key stakeholders and integration in the health and education systems. Locally identified priorities have been addressed and aligned with strategic plans of key partners. Project partners demonstrated ownership of the project, and outlined a range of planned strategies to consolidate and expand on the achievements of the project. Demand for services is increasing, providing opportunities for increased revenue which further enhance sustainability.

#### Effectiveness

The project has met or exceeded almost all project outputs, and the intended project objectives have been achieved. Services are generally of high quality, accessible and affordable. Lessons learned for decentralisation of services to the district level are being incorporated into planning for ongoing decentralisation.

#### Efficiency

The project has adhered to the original workplan and budget. Funding and resourcing were adequate and appropriate for the needs of the project. The quality of the outputs is of a high standard, and contributes to achievement of the project purpose as designed.

#### Relevance

The objectives of the project have remained consistent with the beneficiaries' requirements, both enhancing and extending planning for ongoing service development. The project is aligned with Vietnam national prevention of blindness plans, and particularly the need to address childhood refractive error.

#### Impact

The project has appears to have made a substantial contribution towards reducing the prevalence of avoidable childhood blindness and child visual impairment in Vietnam. The training and equipment provided to the Hanoi Eye Hospital has developed the capacity of the hospital to treat paediatric eye conditions, and enhanced its reputation as a high quality referral hospital.

Selected recommendations are presented below:

### Human Resource Development

- Project management training should be included in future projects, ensuring adequate time provision to cover all topics in sufficient depth.
- There was high demand for training in 'soft skills' of counselling and communication for doctors. Future projects should include an appropriate allocation for this training.
- Decentralising services to the district level and increasing the role of district and commune level services in referral networks requires ongoing support. Close clinical supervision, support and follow up should be provided to ensure quality is maintained as services are transitioned.
- Training for school staff (both nurses and teachers) is important to support high quality, regular RE screening and follow up, and to ensure students wear glasses as prescribed.

#### Disease control

- The impact of the private sector on the quality of glasses has the potential to impact ongoing demand for services. Strategies are required to address this issue.
- The simplified VA chart is valuable, and should be made more widely available if possible.

- The mid-term evaluation was very helpful for checking the quality of screening and refraction, particularly in Hanoi. The findings and recommendations had a significant impact on improving quality.
- The project provides value for other provinces to learn and apply as they do such projects in community. Lessons learned from this project should be disseminated to support this.

Operational research

- The operational research was suited to the needs of stakeholders and the findings have informed program activities.
- It represented good value for the funding expended, and is likely to have a long term influence.
- The findings of the research should be disseminated more widely , both within and beyond the prevention of blindness/eye health sector.
- Both the mid-term and final evaluations were highly valued by project partners. Each provided a number of lessons learned that can be applied to future planning. Many of the recommendations from the mid-term evaluation had been implemented.

Advocacy - communication and awareness raising

- Demand for IEC materials was high. Consideration should be given to making the IEC materials more widely available.
- Additional advocacy with the Department of Education to introduce policy initiatives for promoting eye health would have a wider impact and boost community awareness.

Decentralisation of refraction services to district level

- The project has strengthened the capacity of eye health providers at all levels, and provides a replicable model for other provinces.
- Future projects should consider variations between different districts in terms of capacity. Although the project partners were able to adapt accordingly during the course of the project, it would have been helpful to more closely monitor this and adjust the design at the outset.
- Strong clinical supervision, support and ongoing follow up are required to ensure quality standards are maintained when services are developed at the district level.

Intersectoral collaboration.

• Childhood blindness projects are likely to have some cross-over and common objectives with general child health and development projects. Future initiatives in this area should ensure collaboration with non-eye health sector agencies.

Accessibility, barriers and equity

- Monitoring should be undertaken regarding accessibility to service provision for children in schools for disabled students, and for children residing in orphanages. Consideration should be given to developing allocated funding mechanisms for this if needed and available.
- Possible sources of funding support should be documented and disseminated to assist with raising funds to provide glasses for families unable to purchase them.
- FHF should provide international case studies of cross-subsidisation schemes to project partners if available.

# 1. Introduction/background

Blindness and visual impairment is a significant public health issues in Vietnam, with childhood blindness an area of particular concern. A Rapid Assessment of Avoidable Blindness (RAAB) undertaken in 2007 by the Vietnam National Institute of Ophthalmology (VNIO) identified uncorrected refractive error (RE) as the most common eye health problem among children in Vietnam, particularly school age children. Prevalence of RE increased from 2.5% in 2002 to 10-25% in 2007, with significantly higher rates of RE in urban areas.

An additional survey conducted by the Vietnam Institute of Science and Education in December 2008 on RE in school children (December 2008) also found a high prevalence of RE for school children of all grades including in primary school (18.67%), secondary school (23.47%) and high school (32.68%). This survey also confirmed the higher incidence of RE among school children in urban areas (26.14%) when compared with those in rural communities (14.44%). Additional studies in 2008, conducted by Ho Chi Minh City Eye Hospital (HCMCEH), across a sample of 10,000 high school children in HCMC found that many of those with RE did not wear spectacles or, where spectacles had been issued, ongoing lens correction had not been conducted.

Although data are limited, other paediatric eye diseases (such as strabismus, ptosis and amblyopia) are emerging eye health challenges requiring a long term management plan as identified in the Vietnam National Prevention of Blindness (PBL) Plan. In 2007, there were 1,021 child eye surgeries done at the VNIO and 3,240 at HCMCEH. In 2008 this increased to 1,555 and 4,521 surgeries respectively.

In 2008, a national PBL plan was developed by the VNIO, which outlines specific policies and interventions to address childhood blindness, including: screening for RE amongst children aged 6 to 15 (with 11-15 years being the initial target group); human resource development in RE through training centres; and joint advocacy initiatives between the Ministry of Health and the Ministry of Education and Training.

With a view to contributing to a reduction in the prevalence of avoidable childhood blindness and child visual impairment in Hanoi and Ho Chi Minh City, this Urban Childhood Blindness Prevention Project, developed by FHF in partnership with Hanoi Eye Hospital and HCMC Eye Hospital, is designed to deliver high-quality, affordable, accessible eye care services for children aged 0-15 for 3 years (2010–2012) in the two cities.

The key project partners are: Standard Chartered Bank, the Primary funder through the 'Seeing is Believing' Program managed by the International Agency for the Prevention of Blindness- FHF (Coordinating Agency); Provincial People's Committees and Departments of Health in Hanoi and Ho Chi Minh Cities (Authorising Agencies) and the Eye Hospitals in Hanoi and Ho Chi Minh Cities (Implementing Agencies). Technical and training support to the project was also provided by the VNIO.

Project Goal:	To make a substantial contribution towards reducing the prevalence of		
	avoidable childhood blindness and child visual impairment in Viet Nam.		
Project Purpose:	To strengthen the delivery of high-quality, affordable, accessible eye care		
	services for children aged 0-15 across 14 districts in Hanoi and 6 districts ir		
	Ho Chi Minh City.		
Component 1:	Human Resource Development - Capable eye care personnel capacity at		
	tertiary, secondary and primary levels.		

The project goal, purpose and objectives are as follows:

Objective:	To strengthen the capacity of eye health providers at the tertiary, secondary and primary levels to effectively diagnose and treat childhood- related eye conditions, with a focus on RE.	
Component 2: <i>Objective:</i>	Infrastructure Development To improve child eye care treatment infrastructure in Hanoi and HCMC	
Component 2:	through provision of essential equipment.	
Component 3: <i>Objective:</i>	Disease Control – Prevention, treatment and follow-up To reduce the burden of blindness and improve eye health in children through screening, referral and treatment.	
Component 4:	Operational Research –	
Objective:	To undertake research in project areas to improve the available childhood blindness information resource.	
Component 5:	Advocacy – Communication and awareness raising	
Objective:	To increase awareness and knowledge of childhood-related eye care among local communities and government authorities through eye health education and advocacy.	

A mid-term evaluation of the project was undertaken in November/December 2011. The evaluation found that the project was well designed, managed and implemented; and on track to contribute to its overall goal. A number of recommendations were included to further enhance the effectiveness of this project, as well as recommendations for future projects.

# 2. Approach and methodology

This evaluation was designed to assess the achievement of this project against the stated objectives; the overall contribution of the project to the Vietnam National Prevention of Blindness plan; factors which have contributed to project success; areas of weakness/challenges; and provide recommendations for future program initiatives. It is also designed to include an assessment of the following:

Effectiveness – the extent to which the individual project objectives and outputs have been achieved and their contribution to the achievement of the overall program purpose. This should also include an assessment of the quality, accessibility and affordability of the implemented eye services.

Efficiency – a measure of how economically resources/inputs (funds, expertise, time, etc) have been converted to results.

Relevance – the extent to which the objectives of the project have remained consistent with the beneficiaries' requirements, PBL plans and country needs (i.e. to the operating context). This should also focus on equity, and how the project responded to the needs of specific target groups - the poor, children, women, and people with a disability.

Impact – beyond the individual project achievements, the extent to which the project has contributed to the overall Vietnam National Prevention of Blindness (PBL) Plan.

Sustainability – the potential for continuation of benefits from the project after its completion.

Management – a review of project management procedures including the effectiveness of project partner coordination, project reporting, monitoring and evaluation systems, project planning and budget management.

Partnership aspects – assess partnership relationship between major project stakeholders, and how this supported the implementation of planned activities.

Community aspects – assess the community aspects in term of the involvement of the district & commune health workers, school teachers & school health staff, any attitude changes, community awareness, participation and ownership as the result of the project.

The terms of reference for the evaluation are attached at appendix 1.

The evaluation consisted of a review of project documentation, site visits and stakeholder consultations, and data review and analysis. Guiding questions were developed to provide a framework for stakeholder consultations. In addition to the terms of reference, two key documents were used to inform the guiding questions: the mid-term evaluation report and a research report commissioned for the project 'Attitudes of parents, students and teachers towards glasses use in Hanoi and Ho Chi Minh City', both of which provided insights and identified a number of salient findings relevant to assessing the quality, effectiveness and lessons learned of the project. The executive summary of the mid-term evaluation is attached at appendix 2; the executive summary of the research report 3.

The external evaluator consulted the Sydney-based Vietnam Program Coordinator to identify any potential additional issues not noted in project documentation, as well as the Program Development Effectiveness Manager to ensure the guiding framework aligned with the standard FHF monitoring and evaluation framework and FHF approaches.

Based on these discussions, the external consultant identified additional themes beyond the terms of reference that could inform FHF organisational learning, including the potential for the project lessons learned to be shared and applied in countries other than Vietnam, and beyond the eye health sector within Vietnam. These were incorporated into the guiding questions, and considered in data analysis.

The site visits were designed to triangulate the information provided in the project documentation; assess the extent to which recommendations in the mid-term evaluation were implemented (or reasons for not doing so); assess how well findings from project operational research were applied to the project; and elicit additional information about the process of project implementation, the quality of outputs, key lessons learned and the overall impact on beneficiaries and the Vietnam PBL national plan.

The main target audience for the evaluation includes:

- FHF (Vietnam staff, International Programs, Research, Program Development Effectiveness)
- Government of Vietnam, including the Ministry of Health and VNIO
- Hanoi and HCMC Eye Hospitals
- Hanoi and HCMC Departments of Health
- The SCB Seeing is Believing Initiative
- Other eye health and prevention of blindness agencies

### 2.1 List of documents reviewed

In addition to the project mid-term evaluation report and research report of 'Attitudes of parents, students and teachers towards glasses use in Hanoi and Ho Chi Minh City', a number of other key project documents were provided to the external evaluator prior to the evaluation visit, including project design documents, partnership agreements and progress reports. The full list of documents is attached at appendix 4.

# 2.2 Evaluation schedule

The evaluation was conducted over a total period of 13 days in November and December 2012, as follows:

Activities	Duration	Who
Desk review of project documentation	2 days	External evaluation consultant
Evaluation plan production	1 day	Evaluation consultant and evaluation
		team members
Field review and consultations	6 days	All evaluation team
Data analysis and summary of findings	2 days	External evaluation consultant
Report production	2 days	External evaluation consultant
Total:	13 days	

The field review and consultations schedule is attached at Appendix 6.

### **2.3 Evaluation techniques**

The project documents were reviewed to assess the extent to which project indicators had been met, and identify any areas where there were possible gaps or areas for further assessment, as well as issues for qualitative discussion.

Following review of the project documents, and incorporating the findings and recommendations from the mid-term evaluation, guiding questions for interviews and discussions with key stakeholders were developed. These questions were intended as a starting point for key informant interviews and semi-structured discussion. They outlined key points to be covered to provide a comprehensive process evaluation, while being sufficiently flexible to allow unanticipated findings and unintended impacts to emerge and be explored in greater depth. They also considered wider factors beyond the immediate impact of the project. The guiding questions are attached at appendix 5.

The evaluation took a reflexive, iterative approach to interviews and discussions. As it became apparent that feedback on some aspects was broadly in line across different stakeholders and/or with the findings of the mid-term evaluation, greater emphasis was given to identifying new findings and exploring divergent viewpoints in subsequent interviews, rather than attempting to replicate the same findings between different stakeholders. An example of this is feedback about barriers to accessing services; project partners and school staff in all locations were in broad agreement about the main barriers, however differences emerged in how these were addressed. The different strategies were then given greater emphasis in interviews and discussions.

Reflections on how the findings of both the mid-term evaluation and research on community attitudes to glasses use influenced project activities was also a focus of discussion with the project partners.

Vision testing of representative samples of students who had participated in screening as part of the project, and students who had received free glasses provided by the project, was undertaken during the site visits to evaluate overall quality. The results of the vision testing were compared to testing undertaken during the mid-term evaluation to determine changes in refraction service quality within the life of the project.

### 2.4 Evaluation team members and participants

The evaluation team consisted of the following members:

Ms Marita Hefler – Independent external consultant Dr Nguyen Chi Dung – External technical consultant: Assistant Professor, Vice Director of the Centre of Training and Community, VNIO Ms Nguyen Thi Huong – FHF Project Manager Ms Ngo Thi Phuong Anh – FHF Senior Project Officer (Hanoi) Mr Le Quang Tram Tinh – FHF Project Officer (HCMC)

All team members except Marita Hefler also participated in the mid-term evaluation undertaken in November/December 2011, and were therefore able to provide a comparative perspective. The Project Officers for both Hanoi and HCMC have been involved with the project since inception and were able to provide a good historical overview of the project, as well as insights into specific issues in each project location. The sites visited in HCMC as part of this evaluation were visited in the mid-term evaluation, allowing for a comparison of the project outcomes at different points of time during implementation.

## 2.4 Persons consulted during the evaluation

The evaluation team consulted or met with key FHF staff; the VNIO; project implementing partners, the Hanoi Eye Hospital and HCMC Eye Hospital; and representative samples of all key stakeholders from district and commune health services; HCMC Dept of Education; and staff, parents and students of participating schools. The full list of people consulted is attached at Appendix 7.

## 2.6 Methodology for data analysis

During the site visit, data collected were reviewed at the end of each day to compare key themes with those identified during the documentation review and identify any emerging themes, new issues or unanticipated findings. These were compared to the guiding questions and against the project documents supplied, and incorporated into subsequent interviews for further exploration as appropriate. The evaluation sought to consider data not only in terms of how it provided insight into individual project components, but also how different components intersected and contributed to the overall impact.

At the conclusion of the site visit, the information collected was reviewed and analysed in its entirety, and compared again to project documentation. Key themes were distilled and organised according to the report format included in the terms of reference.

An updated report of project outputs was provided to the external evaluation consultant following the conclusion of the site visits; this was compared to project documentation supplied in the evaluation planning and clarification sought for any anomalies.

### 2.7 Strengths and Limitations

The evaluation benefited from the range of documentation available, and the fact that this evaluation was able to build on the findings of the mid-term evaluation. The comprehensive research that was commissioned by the project also provided a good basis for eliciting high quality information and assessing the flexibility of project partners.

The main limitation of the evaluation was due to time constraints. In particular, the first day of site visits started late and delays were compounded through the day, limiting the time available for interviews and discussions with stakeholders. This affected the quality of the information collected.

The evaluation was able to interview a limited number of project beneficiaries, and those that were interviewed were based on a convenience sample. No insurmountable barriers to accessing services were identified during the evaluation; however given that the only beneficiaries interviewed were already accessing services, there may be additional barriers that were invisible to the evaluation team. The evaluation timeframe also did not allow for interviewing of some specific equity groups, such as disabled children studying at non-mainstream schools.

Some stakeholders were unavailable for participation in evaluation interviews and discussions during site visits, limiting the opportunity for data triangulation and additional perspectives to be incorporated. In some cases, this was because staff who had received training through the project were attending additional specialist training as part of longer-term planning by health services – itself a positive indicator of the overall sustainability of the project. Despite some stakeholders being unavailable, the team is confident that the stakeholders consulted represent a broad cross-section of experiences and viewpoints.

# 3. Evaluation findings

The goal and purpose of the project remained as originally proposed. As noted in the mid-term evaluation, the only changes were to add one district in Hanoi, bringing the total number of districts to 15, and one district in HCMC (district 7) was changed to another (district 8) to avoid duplicating another refraction project being implemented by the International Centre for Eye Care Education (ICEE). Additional training on counselling skills was also provided to staff at Hanoi Eye Hospital, due to demand beyond the original targets.

# **3.1 Project outputs**

The following outputs were listed in section A9 of the project proposal and reported against in 6 monthly progress reports. The final achievement of outputs against project targets and notes about variation from targets are listed in the matrix below:

Objective 1: To strengthen the capacity of eye health providers at the tertiary, secondary and primary levels to effectively diagnose and treat childhood-related eye conditions, with a focus on Refractive Error (RE)

Project activities identified in logframe	Planned project outputs	Total outputs achieved	% target achieved Variance explanation
1.1 RE and basic eye care services improved through increased skills in RE and project management RE skills for eye care personnel at the provincial level	1.1.1 To Train 6 refractionists from Hanoi Eye Hospital to satisfy increasing need of refractive error screening among children.	6 refractionists trained 2 staff trained to conduct surgeries for children 22 staff trained on counselling 1 doctor supported to attend advanced study for 2 years	>100% achieved Additional outputs were based on the actual demand of Hanoi Eye Hospital. The project reallocated savings from other activities for these additional outputs.
	1.1.2 To train local project management	3 members of PMB completed training in	100%

	board on Project management skills and Project M&E	2010 1 PMB member attended Hospital Management Training One PMB member trained on Primary Eye Care ( PEC) and the methodologies to conduct the PEC training for the commune and hamlet health workers	
1.2 RE and basic eye care services improved through increased skills in RE for eye health personnel at district eye care facilities and the establishment of a school RE screening and referral network	1.2.1 Training eye doctors of 6 district hospitals in HCMC on RE screening	<ul> <li>14 district staff in Hanoi trained on RE knowledge and screening</li> <li>6 district staff in HCMC trained to be refractionists, including 2 supported by local district funds</li> </ul>	>100% due to additional demand (additional from reallocated funds) 100%
	1.2.2 Training 136 school health personnel of secondary schools in 6 district in HCMC on RE screening	666 school health personnel trained on RE screening	>100% The project trained not only the school health staff of 6 target districts but others as well.
	1.2.3 Train 1,651 teachers / school health staff of 68 secondary schools and target district in HCMC on RE knowledge and screening.	Cannot conduct the training since the teachers were trained by local fund before the project came.	0% Savings were reallocated to additional activities
	1.2.4 To train 1,980 schoolteachers in 495 primary & secondary schools (4/school) in Ha Noi on refractive error (RE) basic knowledge to assist in identification of RE, low-vision schoolchildren and	2,072 teachers and school health staff trained	>100% Actual number of schools were more than estimated

	timely provision of RE at schools. 1.2.5 Establish networks of RE identification, screening and referral at target schools and communities	Established and operating	
1.3 Strengthened community eye care networks through improved skills and practices of CHWs and VHWs	1.3.1 To give training on primary eye care (PEC) knowledge, including basic eye care, RE prevention for 700 commune health workers and volunteers (CHWs/VHVs).	731 trained	>100%
	1.3.2 To give training on identification of eye malformation among children and appropriate referral for 700 CHWs/VHVs .	731 trained	>100%
	1.3.3 To give training on health surveillance systems and health education skills for 700 CHWs/VHVs.	731 trained	>100%
Objective 2: <u>To improve child</u> essential equipment	<u>eye care treatment infrast</u>	ructure in Hanoi and HCMC	through provision of
Project activities identified in logframe	Planned project outputs	Total outputs achieved	% target achieved Variance explanation
2.1 Essential child eye care equipment provided and necessary facilities upgraded at HEH	2.1.1 To provide appropriate and essential ophthalmic equipments to Ha Noi Eye Hospital to function as focal referral centers for RE.	Completed.	100%
	2.1.2 Setting up eye examination room in Ha Noi Eye Hospital	completed	>100%
	2.1.3. Setting up Orthoptic Department	completed	>100%

2.2 Essential child eye care equipment provided to District Health Centre Eye Units	treatment room for low vision children in Ha Noi Eye Hospital 2.2.1 To provide District Health Center Eye Units with essential ophthalmic equipment in order to effectively function as a focal referral point for	In HN: 14 District Health Hospitals, in HCMC: 6 District Health Hospitals provided with equipment.	>100%
	diagnosis and treatment/surgery.		
2.3 Essential child eye care equipment provided to Commune Health Services	2.3.1 To provide basic eye instruments to CHS's for diagnosis, first aid and treatment of simple and common eye problems and for following up of cataract and RE patients.	250 Commune Health Stations provided with basic equipment	>100%

Objective 3: To reduce the burden of blindness and improve eye health in children through screening, referral and treatment

Project activities identified in logframe	Planned project outputs	Total outputs achieved	% target achieved Variance explanation
3.1 Increased accessibility to RE screening and treatment among children at school and in target communities, with a focus on poor children	3.1.1 Conduct refractive error program at 495 primary and secondary schools targeted districts in Ha Noi and 68 secondary schools in HCM city (screening, diagnosis, proper treatment & education).	521 schools in Ha Noi & 248 schools in HCMC including screening at 8 orphanages	>100% Additional schools due to actual number being greater than initially estimated
	3.1.2 Provide spectacles to 10,000 poor children with RE.	7,574 pairs in HN ( including 1,122 paid for by local funds) 7,586 pairs in HCM Total in HN & HCM: 15,160 pairs	>100% due to variation from original estimate
	3.1.3 Examine and give prescription of spectacles to children with VA<5/10	50,629 children in HN given prescriptions	

4.1 Research activity to improve current sector understanding of knowledge attitudes and behaviours regarding RE and treatment with a focus on school age children and parents	4.1.1 Conduct a survey on attitudes towards spectacles wearing (parents attitudes to spectacle wearing among children, children's attitudes, the	completed	explanation 100%
Objective 4: To undertake res Project activities identified in logframe	earch in project areas to in Planned project outputs	form and evaluate project a	octivities. % target achieved Variance
	3.2.3 Screen and refer children identified with eye abnormalities to appropriate hospitals for further examination and treatment		
	3.2.2 Identify children with eye abnormalities such as strabismus, Trichiasis, congenital cataract, etc		
3.2 Increased accessibility of eye abnormality screening, further treatment and surgery for children in target areas	3.2.1 Surgery provided for up to 300 poor children with strabismus, ptosis, Trichiasis and congenital cataract, etc	258 children ( 351 cases of surgery)	100%
	3.1.5 Screen RE for 450,000 students in Ha Noi and 330,000 students in HCMC.	394,262 students screened in HN 325,603 students screened in HCM	Actual number of students less than original estimate
	3.1.4 Refer children with RE identified by CHWs/CHVs to appropriate health units for intervention		

	interventions and disseminate results to relevant stakeholders		
4.2 Lessons learnt and experiences on pediatric ophthalmic surgeries disseminated among eye care personnel and eye care organisations	4.2.1 Compile lessons learned and disseminate the results among eye care personnel and supporters for reference and further actions.	A book to compile the project achievements & lesson learned has been written and disseminated	100%

Objective 5: To increase awareness and knowledge of childhood-related eye care among local communities and government authorities through eye health education and advocacy.

Project activities identified in logframe	Planned project outputs	Total outputs achieved	% target achieved Variance explanation
5.1 Awareness and knowledge of positive changes to child eye care sector in Vietnam made through collaboration with international, national and local stakeholders	5.1.1 Deliver monthly eye health education and awareness campaigns at all levels through a variety of multi-media channels	<ul> <li>Wide variety of awareness and health education campaigns conducted</li> <li>Hanoi:</li> <li>91 messages</li> <li>broadcasted on national TV</li> <li>2 clips on RE and trauma aired on national TV</li> <li>336 school talks</li> <li>HCMC:</li> <li>142 school talks</li> <li>3 contest on eye care organized</li> </ul>	

5.2 Improved knowledge and awareness of child eye health issues including behaviours around preventative action, and accessing services	5.2.1 Produce and distribute Information, Education and Communication (IEC) materials within communities in project areas on RE, congenital abnormalities and child eye care (including local radio programs, newspaper articles and other materials as appropriate/relevant)	Hanoi: 21,800 DVDs on RE produced 92,000 IEC copies produced and distributed 8,000 posters produced and distributed 153 RE panel produced and installed in 153 schools HCMC: 90,500 IEC copies and 2,840 posters produced and distributed 400 DVD copies on RE produced and distributed 75 RE panels	100%
	5.2.2 Evaluate effectiveness of eye health promotion activities/strategy	Assessment has been completed	100%
5.3 Improved general awareness of child eye health, project activities and impact in the general community	5.3.1 Produce a documentary of project activities and child blindness to be aired on Hanoi and National TV	1 documentary produced and aired on national TV	100%
	5.3.2 Hold a photo exhibition promoting child health issues including RE	Photo exhibition has been organized	100%
	5.3.3 Press meetings/visits to promote SCB support for project activities and achievements	3 press visits organized	100%
5.4 World Sight Day celebrated each year with	5.4.1 Conduct World Sight Day events	3 WSDs organized	100%

educational activities promoting eye health	appropriate with V2020 annual theme		
5.5 SCB staff are able to participate and experience the work of the project	5.5.1 Organize social activities for SCB staff to get involved in the project work	14 events for SCB staff	100%
Objective 6: Project Managen	ient	-	
Project activities identified in logframe	Planned project outputs	Total outputs achieved	% target achieved Variance explanation
6.3.1 Mid term review	6.3.1 Mid term review	Mid term review completed December	100%
		2011	

# **3.2 Project budget**

The overall project expenditure is close to the original budget, with a total variance of USD\$3617. There was significant variation for individual line items; however savings in some areas were able to be reallocated to other activities. As a result, the overall outputs of the project exceed the original planned outputs within the allocated budget.

The summary project budget and final expenditure (USD) are as follows:

Activity	Project budget	Actual expenditure	Comments
Organisation costs	125,850	105,975	Office costs were shared with other projects, so were less than budgeted, with underspending therefore able to be used on direct project costs. Significant savings were also made in terms of travel, with project staff being based at the FHF Ha Noi liaison office.
Support to local implementing partners	36,490	21,367	Partner travel and office costs were less than budgeted. Audit costs of partners have also been combined with monitoring visits, saving money.
Service delivery costs	335, 259	416,202 (includes 98,062 local contribution)	Due to the high demand of synotophore usage in the amplyopia room and budget underspend from other components, more equipment was provided for Hanoi Eye Unit than originally planned. As identified in the July – December 2011 report, further budget reallocations were made for the 2012 budget based on the actual situation and current needs of the community, including further budget for eye surgeries and provision of spectacles for poor children in Ho Chi Minh and Ha Noi.
Training	81,860	47,110	Training of 1,651 teachers and school health staff of 68 secondary schools and target district in HCMC on RE knowledge and screening was not conducted, with this activity actually being completed before the project

			started.
Other project activity costs	125,034	172,886	As identified in the July – December 2011 report, further budget reallocations were made for the 2012 budget, with increased investment in this component made in the final year to build on the effective education and communication activities to date.
M&E	143,200	87,770	M&E costs were less than budgeted, with travel costs being less than anticipated, and costs also able to be shared with other projects
Total	847,693	851,310	Total variance: 3617

# 3.3 Human resource development

#### <u>Hanoi</u>

In Hanoi training was provided for staff at Hanoi Eye Hospital (refraction and surgery, including specialist skills in strabismus and amblyopia; counselling skills; project management); district and commune level health services (refraction, RE screening and basic eye care), school health staff and teachers (RE screening and basic eye care).

As noted in the mid-term evaluation, training for nurses and doctors at HEH was relevant and necessary, and developed a range of new skills including retinoscopy and management of accommodation (where each eye has different vision). Surgical and treatment outcomes are of a high standard – this is discussed further in section 3.4. In terms of clinical supervision, staff at the hospital reported that there is monthly assessment and cross-check between departments, and annually between hospitals and the MOH.

Project management training provided to PMB staff at Hanoi Eye Hospital provided a number of completely new management tools and approaches. These are proving to be useful in management within the hospital more generally, as well as for the project itself. However, participants noted that the time allocated was insufficient for the range of topics covered, and further support would be appreciated.

The HEH appreciated the 'soft skills' of communication and counselling that had been developed as a result of training provided by the project. This has been helpful in clinical practice, and has also resulted in some staff doing talks in schools which generates interest among students, and supports other school-based initiatives and activities, particularly by school nurses.

The impact of participation by district and commune health services in the project was somewhat limited, although they reported finding the training very useful, and that it helped them to be far more involved in school health screening. Overall, HEH felt it has enhanced the role of district and commune level staff as 'champions' to assist in education and referral. School staff also reported that district and commune level staff were a source of knowledge and education about RE and eye health.

The school nurses interviewed indicated they are far more active and confident about their work since participating in the training. They reported having a deeper understanding of eye health issues and the need to follow up with students to ensure consistent glasses use, and regular eye checks. Participation in the project has generally facilitated and increased cooperation between nurses with parents and teachers. The project has also facilitated school nurses doing class talks about eye health. They observed that the project has generated a high level of interest among children, leading to greater awareness of refractive error and eye health.

Teachers (both those who had and had not participated in training) reported that they felt able to talk to students about eye health more than previously. They indicated that they are able to take a more proactive role in supporting children with eye problems, for example by changing class seating arrangements as necessary. They also indicated a greater awareness and understanding of the range of factors that can prevent refractive error and other eye problems, and were able to correctly identify and explain a number of factors. These included the link between nutrition and eye health, the need for appropriate lighting, good posture and appropriate physical study arrangements, both at home and school. Teachers who had not received training through the project reported learning about eye health through television public service announcements and advertisements, IEC materials supplied through the project, and local commune health workers. It was clear that the knowledge and awareness was being reinforced through multiple channels.

#### <u>HCMC</u>

In HCMC, training was provided for staff of each district hospital in refraction and eye health management; and for school nurses in screening, supporting trauma care, and providing information to students.

As in Hanoi schools, the school nurses reported greater confidence in communication about eye health, and improved skills and knowledge in relation to screening. The nurses reported that the project has reinforced their work, and facilitated them presenting to students regularly at school meetings, as well as communicating through notices on school boards.

Training of teachers was not undertaken in HCMC, however the teachers interviewed reported similarly increased awareness and understanding of RE to teachers in Hanoi, indicating that the benefits of project training and other activities have extended beyond training participants.

In each of the district hospitals visited, both of the nurses interviewed who had been trained in refraction reported their primary role as nursing, with refraction forming a smaller overall percentage of work.

At district 9, the nurse estimated that approximately 60% of her work is nursing. In the mid-term evaluation, the hospital had only just set up their service, and at the time had only received four patients. During this evaluation, they reported that they have received a total of 2909 patients so far this year, including a total of 136 students and 97 adults since September. It was unclear how many of the total were refraction patients. The hospital estimated that overall, 30% of their patients are aged between 6-18 years. The project-trained nurse has subsequently participated in additional training, so has only had a total of 11 months working in the hospital since receiving project training. The hospital has still been able to offer services, as it has established a refraction service as part of a private optical shop located in the hospital grounds, and there is another (previously trained) refractionist assigned to this role. The hospital also now has an eye doctor.

The nurse at the other district hospital was not able to estimate the percentage of her work devoted to refraction, but reported doing 4-5 cases of refraction per day, most of whom are students.

Both hospitals are currently in the process of expanding their eye teams, and planning is underway for expanded refraction and optical dispensing services. In one hospital, there are currently no clinical supervision or quality control arrangements in place due insufficient capacity. However it is an issue that the hospital is aware of, and is planning to address as part of service expansion.

## 3.4 Infrastructure development

The evaluation team visited the orthoptic room at Hanoi Eye hospital funded by the project. The room has four synotophores, of which 3 are provided by the project, as well as some vision location machines. The room is well utilised, and the equipment provided through the project is kept in good condition and used as intended.

The engineer in charge of maintenance was interviewed about the equipment supplied by the project. He has been in his job for 30 years, and in addition to ensuring all equipment is functional, has also developed some simple tools for treating amblyopia. He outlined the steps followed for providing service/advice to resolve equipment problems as follows: (1) initial response attempt to resolve by providing advice by telephone (2) send a technician to follow up if needed (3) escalating to him if needed. He advised that he is capable of disassembling and reassembling a range of equipment, and provides advice for the VNIO when a problem is unable to be resolved there.

District health staff in Hanoi reported that they are happy with the basic eye care equipment provided through the project, and there have been no problems to date. The equipment is mostly used in school screening, as they do not currently receive many patients at the health station. Commune health staff in Hanoi reported that the equipment provided is appropriate to their needs and well utilised. In particular, the head mounted loup is very useful as it allows them to perform minor procedures, such as removal of foreign objects. Around 7 cases per month are receiving treatment as a result. Commune staff in one district reported that they have not had a new VA chart since 2002, and would have found it useful to receive one.

Refraction equipment supplied to district hospitals in HCMC is well utilised by qualified staff who have received training at HCMC Eye Hospital. As noted above, not all staff using the equipment were trained in this project, as some had been trained prior to this project. Staff at the district hospitals advised that they have experienced no problems with using the equipment, and confirmed that they have equipment maintenance departments who are able to handle any problems.

## 3.5 Disease control

#### <u>Hanoi</u>

As noted under project outputs, 351 surgeries for 258 children to correct strabismus or ptosis or congenital cataract have been provided through the project at Hanoi Eye Hospital. The hospital advised that referrals came both from schools, and through the partnership with the child support fund in surrounding provinces (which provides subsidies to assist poor families to access surgeries). The district health station at Hoang Mai advised that they have referred 33 cases for strabismus or ptosis. This was not able to be verified against other data sources by the evaluation team. The district health station at Gia Lam reported that they referred 2 strabismus or ptosis cases in 2010 but no referrals in 2011 or 2012. Feedback from HEH is that for future initiatives they would focus more on school communication for referrals, as the number of referrals from the district and commune health stations are very low.

The orthoptic room at Hanoi Eye Hospital receives an average of 20 children per day to treat amblyopia and strabismus. In summer, the number of patients increases to over 30. Eight children with strabismus attending the hospital who came for post-operative check-ups were examined during the evaluation visit. The surgical outcomes were good with no complications, demonstrating that Hanoi Eye Hospital staff have full skills to receive and treat these paediatric eye conditions. It should be noted that 80% of children who undergo strabismus surgery need further orthoptic treatment to recover the vision in both eyes. From the date of its set up (15 April 2011) up to now, the orthoptic room has received more than 1,000 occasions of service for children receiving rehabilitative practices. HEH should ensure that the orthoptic room is used to full capacity to meet the requirements for post-surgery treatment.

In Hanoi, the evaluation team tested vision of students at the two 2 schools to assess the quality of screening and spectacles provided. Visual acuity was tested using the simple VA charts (using lines of 7/10, 5/10 and 3/10). The results are as follows:

Linh Nam secondary and Dong Du primary schools	Types of students	<b>V.A. ≥ 7/10</b> (both eyes)	<b>V.A. &lt; 7/10</b> (1 or both eyes)
Students with	Provided	29/34 = 85.29%	3/34 = 8.82%
spectacles provided	Forget or lost glasses	0/34 = 0.00 %	2/34 = 5.88%
through project	Total	29/34 = 85.29%	5/34 = 14.71%
Randomly screened			
students	Not have spectacles	240/307 = 78.17%	17/307 = 5.53%
	Buy spectacles by themselves	38/307 = 12.37%	10/307 = 3.25%
	Forget or lost glasses	0/307 = 0.00 %	2/307 = 0.65%
	Total	278/307 = 90.5%	29/307 = 9,45%

The vision of students is improved significantly after being provided spectacles. The rate of students with vision more than 7/10 is 85.29%. This is a remarkable improvement compared to the results of vision testing in the mid-term evaluation. The improvement is attributable to a number of quality improvement and control measures introduced by HEH based on recommendations in the mid-term evaluation. These include refresher training for refractionists following the mid-term evaluation, and ensuring screening and refraction procedures were followed more closely. In addition, HEH sent qualified staff to attend screening and refraction for students, and complicated refraction cases are referred to HEH for follow-up. Prior to delivering spectacles to students, the spectacles are retested to ensure accuracy.

Interviews with students revealed only 44% wear their spectacles frequently. Further health education activities to raise awareness among students to wear spectacles as prescribed may assist with boosting this rate.

### <u>HCMC</u>

The evaluation team undertook vision testing at two schools in HCMC: Hoa Lu (district 9) and Nguyen Hien (district 12) schools.

At Hoa Lu secondary school, the team tested the quality of provided spectacles through random screening for 40 out of 69 students provided spectacles and randomly screened 136 students of the sixth, seventh and eighth grades. Visual acuity was tested with the simple VA charts (using lines of 7/10, 5/10 and 3/10). The results are as follows:

Hoa Lu school	Types of students	V.A. ≥ 7/10	V.A. < 7/10
		(both eyes)	(1 or both eyes)
students with provided	Provided	10/40 = 25.0%	1/40 = 2.5%
spectacles	Buy spectacles	11/40 = 27.5%	10/40 = 25.0%
	themselves		
	Forget or loss	2/40 = 5.0%	6/40 = 15.0%
	Total	23/40 = 57.5%	17/40 = 42.5%

		Not have spectacles	52/136 = 38.23%	18/136 = 13.23%
		Buy spectacles	31/136 = 22.79%	31/136 = 22.79%
Students	screened	themselves		
randomly		Forget or loss	0/ 136 = 0.00 %	4/136 = 2.94%
		Total	83/136 = 61.03%	53/136 = 38.97%

At Nguyen Hien School, the ET also screened randomly 46 students who were provided spectacles and screened for 188 students of sixth, seventh, eighth and ninth grades. The results were:

Nguyen Hien school	Types of students	TL ≥ 7/10	TL < 7/10
		(both eyes)	(1 or both eyes)
	Provided	15/46 = 32.61%	7/46 = 15.22%
Students provided			
spectacles	Buy spectacles	5/46 = 10.87%	6/46 = 13.04%
	themselves		
	Forget or loss	2/46 = 4.34%	11/46 = 23.91%
	Total	22/46 = 47.82%	24/46 = 52.17%
	Not have spectacles	123/188 = 65.42%	28/188 = 14.89%
Students screened	Buy spectacles	25/188 = 13.29%	10/188 = 5.32%
randomly	themselves		
	Forget or loss	0/ 188 = 0.00 %	2/188 = 1.06%
	Total	148/188 = 78.72%	40/188 = 21.27%

Overall results for both schools:

	Types of students	V.A. ≥ 7/10	V.A. < 7/10
		(both eyes)	(1 or both eyes)
Students provided	Provided	16/86 = 18.60%	16/86 = 18.6%
spectacles (86)	Buy spectacles	4/86 = 4.65%	17/86 = 19.76%
	themselves		
	Forget or loss	45/86 = 52.32%	41/86 = 47.67%
	Not have spectacles	175/324 = 54.01%	46/324 = 14.19%
Students screened randomly (324)	Buy spectacles themselves	56/324 = 17.28%	41/324 = 12.65%
	Forget or loss	0/324 = 0.00 %	6/324 = 1.85%
	Total	231/324 = 71.29%	93/324 = 28.71%

Spectacles provided for students in both schools in HCMC were found to be lower quality than in the mid-term evaluation.

Only 57.5% students of Hoa Lu School and 47.82% students of Nguyen Hien School who were provided spectacles or bought spectacles themselves have VA at or over 7/10. This may be due to the fact that it has been between 8 months to one year since spectacles were supplied, which is longer than the time in the mid-term evaluation. As a result, the dioptre in students has increased, requiring a new prescription. This also explains why 32 students who were provided glasses through the project had subsequently had spectacles purchased by their parents. It demonstrates the impact the project has had on alerting the parents and schools about the importance of VA in students, resulting in parents paying more attention to the VA of children and ensuring that they had follow up eye checks. However, it raises concerns about the quality of follow up and glasses being

purchased. One school nurse advised that she is aware the quality of private opticians can be variable and is not monitored. She therefore advises families to avoid these.

In random screening for 324 students of 7 different classes of above schools, only 71.29% students have VA of 7/10 and the remainder (28.71%) have VA <7/10. Of these, 14.19% students with low vision have not ever had spectacles, and 12.65% students with low vision wear spectacles bought by themselves. This suggests screening and VA testing for students needs to be done more frequently, as there are many students coming from primary schools, many of whom acquire or develop refractive error.

In 2012, HCMC eye hospital (HCMCEH) has transferred screening and refraction to district 9 as a pilot. This is a good decision to reduce the workload for HCMCEH and to improve the capacity for lower levels. However, after the first periodic screening at the beginning of the school year, there are still many students with refractive error who are not yet provided spectacles (14.19%) and many students are wearing improper spectacles which need to be replaced and have poor vision (12.65%).

Discussions with both the district hospitals revealed there is limited follow up for refraction services, either to check quality or ensure glasses are being used. In district 9, there appears to be no quality assurance mechanisms in place for the refraction and optical service established by the Preventative Medical Centre. While it was beyond the scope of this evaluation to determine where families are going for follow up screening and updated spectacles, it is possible these are factors contributing to the poor VA results for children in the two HCMC schools visited during the evaluation.

### **3.6 Operational research**

The research commissioned for the project on attitudes to glasses of students, parents and teachers was seen as an original contribution to the knowledge of project partners, which was relevant and highly valued by Hanoi Eye Hospital and HCMC Eye Hospital, as well as other stakeholders, for the insight it provided about community attitudes to eye health. It helped prompt greater emphasis on communications subsequently developed, and also ensured that communication materials directly addressed community misconceptions about eye health. Findings of the research also helped inform the content of eye care competitions that were held in HCMC. The research not only had practical applications for this project; project partners reported the findings will continue to be helpful for guiding planning for future program initiatives.

The research found that parents, teachers and school health staff were concerned about excessive student workloads and insufficient rest and outdoor play time. This was confirmed by a survey of 16 schools which found students have an average of only 1.5 hours total outdoor play time per day. School staff interviewed during this evaluation reported that they are attempting to structure school days differently to encourage more outdoor and/or rest breaks for students.

Despite the fact that many of the findings were used to inform project activities, there were some research findings that were missed by both project partners and FHF staff (for example, the research report noted that some schools in Hanoi were providing eye drops to students on a weekly basis; none of the stakeholders consulted during the evaluation were aware of this.) Further follow up with the researchers during this evaluation revealed that this occurred in only one school, and the eye drops administered were Natri Clorit 0.9% salt water. In this case, it is of minimal consequence, however it does highlight a need for improved review and follow up of research reports.

While the research was well applied to this project, there were a number of missed opportunities for it to have wider application to childhood blindness, and advocacy for child health and development more generally. It does not appear to have been reviewed against similar research commissioned by

FHF, or other eye health agencies, to identify common themes or contradictory findings which could contribute to a common body of international knowledge about community attitudes to childhood refractive error. While the executive summary of the report was distributed to other Seeing is Believing donor recipients through the IAPB SiB newsletter, it was not formally published in a research journal.

Although some of the findings would be of interest to child health and development organisations more generally, the research report has also not been disseminated beyond the eye health sector. The issue of children having excessive study loads and insufficient outdoor play time is also a key risk factor in the rise of non-communicable diseases, which are recognised as a global public health and development challenge, and an emerging problem in Vietnam, particularly in urban areas. This finding could therefore have contributed to advocacy and policy development designed to address non-communicable diseases.

## 3.7 Advocacy - Communication and awareness raising

The IEC materials have a high level of awareness and have been well received by the community. There is strong demand for these materials, which exceeded what the project was able to supply; several stakeholders, particularly at the commune level, advised that they would appreciate additional supplies.

Students interviewed in both Hanoi and HCMC demonstrated a high level of knowledge about eye health including the factors that contribute to refractive error, symptoms, and measures to protect eyes. This included the need to minimise close work, ensure correct posture, good lighting, and appropriate nutrition (they were able to accurately list important foods for eye health). Students identified the sources of their knowledge as posters, school talks, television programs and advertisements about eye health, textbooks, and advice given by doctors during screening. Students were shown examples of IEC materials; a majority reported being familiar with the materials shown. School nurses in Hanoi reported that although they have previously received support from the district health station, this was the first time they had received IEC materials. The IEC component of this project supported their work and was greatly appreciated as it supported efforts to raise awareness within the school community and improve communication with parents to ensure follow up to screening.

Further information about the effectiveness of the IEC materials will be available from the detailed evaluation of the materials, undertaken in October 2012. At the time of preparing this evaluation report, the IEC evaluation report was being finalised for dissemination.

Parents interviewed demonstrated awareness of the need to follow up school screening. The small sample interviewed were very proactive and several were aware of their child's eyesight problems, and had taken action, prior to school screening. In some cases, parents were already aware of refractive error and child eye health, however the project appears to have increased this awareness.

Both the schools visited in Hanoi have a large permanent wall mural to advertise the eye care program and reinforce good habits to protect eyes. These are located in highly visible locations near the entrance to the schools, where they can be viewed by parents, students, teachers and general members of the public.

In HCMC, all schools visited reported an overall greater awareness of both students and parents about eye health as a result of the project, and plans for the school to continue to prioritise RE as an important issue. As in Hanoi, there was a high level of awareness among both students and parents about risk factors, how to protect eyes, the need for regular screening and follow up. Students

reported being exposed to a wide range of IEC materials. In addition, anecdotal reports suggest that attention to protective factors is also occurring at home due to communication from the school to parents about appropriate study conditions.

Hanoi Eye Hospital noted that for World Sight Day there is usually a standard meeting held, but with the support provided by this project, the profile and participation of the event has been significantly boosted. Supporting data to quantify the impact was unavailable.

#### **3.8 Effectiveness**

The project appears to have developed a good model which can influence longer term planning for childhood blindness prevention and RE. Services provided meet standard benchmarks (or the technical capacity exists to improve the standard and planning is in place to do so), are easily accessible, and were considered affordable by project beneficiaries interviewed. The finding of affordability of services aligns with findings in the research report on community attitudes to glasses, which provided detailed data on price acceptability by parents according to income levels, regions, occupation and child's schooling level.

The barriers to accessing services cited by project partners, school staff and district/commune health staff were similar in all areas, and aligned with the findings from the operational research undertaken on attitudes towards glasses use both cities. These included parents being too busy to follow up, lack of care, and lack of prioritising eye health. The research found that 20% of parents do not do anything after being informed of their child's vision problems. In HCMC, the schools visited had a high number of children from migrant families and/or children residing with extended family rather than their parents, which were also cited as contributing factors to children being unable to access refractive services and spectacles. Barriers to accessing services are being addressed by project partners as outlined in section 3.10, and through targeted follow up by school staff with families. Additional measures as outlined in section 3.12 are also planned.

Refraction quality in Hanoi has increased significantly since the mid-term evaluation. Dr Dung reported that he was very disappointed with the quality in the mid-term review, and provided recommendations to improve quality. As outlined under disease control, Hanoi Eye Hospital implemented a number of measures based on these recommendations.

As outlined in section 3.5, the standard of strabismus and ptosis surgery and orthoptic services provided at Hanoi Eye Hospital is good. The hospital has established direct referral arrangements with the child sponsorship fund in surrounding provinces to facilitate access to surgery for families otherwise unable to afford services; feedback from a small sample of patients interviewed at the hospital indicate that services are somewhat affordable. One family interviewed received free surgery subsidised by the child sponsorship fund, but found it difficult to pay fees of VND30,000 (approx AUD\$1.36) per day for follow up treatment, particularly as the father is a casual labourer and travel for treatment means forgoing income for the day, in addition to travel costs. The issue of accessibility to services will require ongoing attention.

While the screening and referral, surgery and refraction services developed or strengthened by this project are of a high standard, the quality of refraction services has the potential to be undermined by private optical services. It was noted that these fall under the jurisdiction of the Ministry of Investment only; the Ministry of Health has no power to regulate or enforce quality standards. As a result, the quality of spectacles is not assured, even if refraction is performed properly.

### **3.9 Efficiency**

The project has either met or exceeded most of the output targets identified in the project design. In most cases, the equipment supplied and expertise developed through the project are being effectively used, often exceeding expectations (for example, a school in HCMC has taken on the eye competition as a special project and trained students as peer educators). The IEC materials have been very enthusiastically received and well-utilised, with the result that many students and their families appear to have a high level of awareness of eye health issues.

The one area of weakness appears to be the equipment and training provided at the commune, and in some cases district, level is not being utilised to the extent that might be expected. This can be attributed to a number of factors: in Hanoi, it is likely because the Hanoi Eye Hospital is not yet at the stage where it can fully decentralise functions to the district level, in part because it is still itself building its reputation for, and community awareness of, the high quality services it offers. Patients are readily able to self-refer to the HEH and/or VNIO, and would in any case be referred to either or both for more complicated cases. The good reputation and prestige of both the VNIO and HEH among Hanoi residents, and their close proximity to both institutions, creates a challenge for attempts to develop more services at the district level.

As the experience in HCMC shows, decentralisation of services to the district level will require focused support and long term planning.

### 3.10 Relevance

The project has closely followed the original design, which was based on clearly identified beneficiary requirements and the Vietnam national prevention of blindness plan. Project partners noted that refractive error is the main cause of childhood blindness and/or low vision, and a necessary component of achieving prevention of blindness targets. This project has contributed to the capacity of services in both cities to meet these targets.

Hanoi Eye Hospital provided feedback that as a result of this project, it can now be a main contributor to tackling childhood blindness - through the provision of specialist services for strabismus and amblyopia, and as a provider of high quality refraction services for children; as well as a technical leader for childhood blindness. In the words of the Vice Director of the hospital as a result of this project "the hospital has grown up – in planning, implementation and management". The project has also been responsive to feedback and emerging needs, such as including additional training for HEH staff in counselling and communication skills, which has proved to be very valuable for staff to engage in IEC activities.

In HCMC, the project has contributed to decentralising refraction services to the district level, allowing the HCMC EH to take a technical leadership role in expanding quality services throughout the city.

Key equity target groups for this project include the poor, and children with a disability. The needs of these groups were well integrated into this project as part of universal school screening and provision of free glasses for poor students. The mid-term evaluation found that there was lack of transparent and consistent criteria for deciding who should receive free spectacles and recommended that standard criteria be developed and used. This was done, and schools reported they now follow the criteria provided in order to better target poorer students.

As part of routine annual health screening, screening was undertaken for children at schools for children with disabilities and children residing in orphanages. In 2011, 881 children were screened, of whom 20 received free glasses; in 2012, 1176 children were screened, of whom 192 received free spectacles.

Gender disaggregated data were not available at the time of the final evaluation. School enrolment and attendance rates in Vietnam are high, with no significant difference between boys and girls; it is therefore likely that screening has addressed the needs of both boys and girls equitably. However, when it becomes available, data on free glasses distribution should be examined to determine the proportion of glasses provided to girls and boys, and whether it is in line with the overall RE prevalence rates by gender.

The project partners also attempted to address the needs of poor children through identifying and utilising funding sources to further increase access to services and the provision of spectacles. Hanoi Eye Hospital has worked closely with the national child sponsorship (assistance) scheme and other fundraising schemes to assist low income families to access surgery, while in HCMC a study motivation fund has been utilised by schools, as well as encouraging fundraising within schools. Data on the exact number of children who were provided assistance through these mechanisms, and details of any unmet demand, were not available at the time of the evaluation.

# 3.11 Impact

The project partners have valued this project as a pilot model from which they are able to apply lessons learned to future planning. This includes a better understanding of the challenges faced in devolving services to the district level, and how these challenges can be addressed. It also includes a better understanding of community attitudes and understanding of RE and eye health, and appropriate messages to include in community education.

The VNIO provided feedback that this project has contributed to some progress towards national targets. This is necessarily limited by both the project timeframe and limited geographic areas covered. As a pilot project, it has provided a number of lessons learned, particularly for other provinces as they plan for decentralisation of services to the district level. Dr Dung noted that the opportunity to undertake evaluation has been very important, in particular to check the quality of refractive services and spectacles. He has learned a great deal from the evaluation process in terms of the need for ongoing clinical support and follow-up training, as well as monitoring of quality as services are decentralised. He has presented findings from the mid-term evaluation to national ophthalmology meetings, and plans to disseminate lessons learned from this evaluation at future national workshops.

The PMB at Hanoi Eye Hospital reported that the impact on the hospital has been considerable, particularly in increasing the prestige and image of the hospital, and in turn increased demand for services. This was a view confirmed by FHF and other stakeholders. Not data was available to be quantify this at the time of the evaluation, although statistics may be available when the 2012 patient data has been collated by the hospital.

## 3.12 Sustainability

The project has followed closely the principles outlined in the original project proposal for sustainability. Extensive consultation was undertaken with key stakeholders, resulting in a high level of local ownership. This meant the project activities fitted with existing plans, or enabled the implementation of plans for which there had previously been insufficient resources. It also prompted the development of new strategies and longer-term plans for expanded services and/or additional staff development.

There was a high degree of integration of the project into the public health and education systems. Existing structures, administrative systems and personnel were well utilised, and the training and equipment provided through the project have stimulated participants to prioritise refractive error

and childhood vision. As a result, several stakeholders described ongoing strategies which they have initiated to continue raising community awareness and strengthening referral networks.

A high degree of cooperation was evident between the education and health sectors, with both education and health providers observing the benefits of ongoing cooperation and increasing demand for, and access to services.

An example of ongoing planning is devolution of refractive error services to the district level in HCMC, and plans to develop expanded eye services and high quality optical dispensaries. In Hanoi, planning is also underway to develop eye services at the district level; this is expected to raise additional revenue. Expanding eye services is recognised by district services as offering opportunities for increased revenue, and therefore ongoing sustainability.

In District 12 in HCMC, the district hospital is in the process of developing a 5 year plan to develop a high quality full optical service in collaboration with the HCMC EH. The service will be operated as a joint service during the term of the plan with revenue to be shared. HCMC EH will provide technical support and supervision during this time, before full responsibility for the service, and all revenue it generates, will be transferred to the district. The planning for this was prompted by the hospital's participation in this project.

HCMC EH reported that they are unsure how to manage ongoing provision of glasses for poorer families. They are aware of cross-subsidisation approaches, and intend to include this as a component of the optical service in district 12. However it is in the early stages of planning, and they are not yet sure how it will work. Suggestions for FHF to provide follow up for this are included in the recommendations section of this report.

The project aligned well with the Vietnam National Plan for PBL and plans in both Hanoi and HCMC. The VNIO, HEH and HCMCEH all observed that lessons learned from the project will be vital in planning and implementing childhood blindness prevention plans in other provinces.

### 3.13 Management

The project was delayed in the early phases due to delays in obtaining permission from the city authorities. This delay was due to unfamiliar bureaucratic procedures and the competing demands of city authorities. However, once approval was obtained, the project was able to be implemented smoothly, and many components were completed ahead of time.

There were a number of adjustments made to the project as a result of the findings of the mid-term evaluation. For example, the quality of refractive error correction has improved markedly in Hanoi, as a direct result of actions taken in response to the findings and recommendations of the mid-term evaluation.

In both cities, the project partners were able to respond in a flexible manner to changes and the specific context in different areas. For example, the HCMC EH worked more closely with the preventative health centre than the district health station in one district when they want to transfer the RE screening and refraction conducted in 2012 to district level as a pilot, as they had better capability to progress the project aims.

A review of the budget and expenditure shows that the project was adequately resourced and well planned. There were some variations to the original budget, with savings in some areas being

reallocated to provide additional outputs for other components. As noted in section 3.2, overall budget variance was just over USD3000; approximately 1%.

### 3.14 Partnership aspects

There was evidence of a high level of cooperation and effective management between all project partners and key stakeholders such as the Department of Education, as demonstrated by the active involvement and contribution of schools. The external evaluator observed that FHF staff have an excellent working relationship with both the Hanoi and HCMC Eye Hospitals, and a good understanding of the partners' needs, activities in each area and challenges faced in implementing the project. The project partners in Hanoi reported that the project has fully met all project expectations.

This project has demonstrated the potential to utilise the existing relationship between the education and health systems to increase awareness and develop referral pathways for services, and better integrate effective eye care with school health screening programs. HCMC Eye Hospital staff noted a key achievement as being increased receptiveness of the Department of Education to have teachers involved in screening. At the start of the project, this was something that was resisted by the Department; however officials now see the value of the project and are more willing to cooperate.

In district 9, HCMC, HCM Eye Hospital worked with the district hospital as the main partner from the beginning of the project. In 2012 screening and refraction was transferred to the district level as a pilot step. For this activity, HCM EH selected the Preventative Medicine Centre as they had set up their refractive service and optical shop already, although it is unclear if the quality is of an adequate standard. FHF provided refraction equipment to the district hospital, which has also set up a refraction service. HCMC EH is aware of the competition between the two services, and held a meeting to assess which was ready at the beginning. As the Preventative Centre was ready to start while the district was not, HCMC EH were happy to support it. They see the competition as being healthy and complementary, and likely to result in a higher quality of services.

In terms of how well the project has met expectations, there was feedback from district and commune services in Hanoi that more equipment such as additional VA charts at the commune level was expected. There was also the hope that an optician would be trained. It was unclear whether this expectation was a result of unclear communication about what would actually be provided by the project, or a general expression of need. As noted above, planning is underway in cooperation with HCMC EH for this service to be developed, independently of FHF. One district hospital in HCMC also stated that they expected that training would be provided for cataract surgery. It is also unclear why this was an expectation, however given the specialised nature of childhood cataract surgery, this would be an inappropriate service to be developed at the district level.

In HCMC, schools reported that the project has either met or exceeded expectations in terms of what has been provided. The schools initially expected only screening, so the IEC and free spectacles were much appreciated and greatly enhanced the effectiveness of the project. These helped to generate significant interest among students. Free glasses in HCMC were much in demand, and school staff reported receiving additional requests for these after they had been provided, even among students who are able to afford to purchase glasses.

The CEO of SCB Vietnam, as the project funder, commented favourably on how well the project is managed and the quality of opportunities available for bank staff to engage with the project, which has resulted in enhanced awareness and commitment. Project events have also provided for visibility of the project and SCB's support. It was noted that while the project has a less immediately

obvious impact than bringing an entirely new service where it may not have previously existed (eg setting up a new ophthalmic unit in a provincial hospital), the proximity of the project to bank headquarters was an advantage in terms of engaging bank staff in the project and stimulating their interest in, and commitment to, this and other projects. He also noted that engagement for staff is an important reinforcement of the Bank's values and the business case for doing business responsibly. He expressed a high level of confidence in the professionalism of FHF staff and that all the projects SCB has supported have achieved what was promised. He specifically noted that the projects are "disciplined, measurable, and value for money". This was reinforced by his good relationship with the FHF Country Manager, and the opportunity to meet senior FHF staff from Sydney.

While the partnerships were strong between all key stakeholders involved in the project, there was no collaboration with other potential child health/development partners outside the eye health sector. This may have been beneficial for information sharing and common approaches where project objectives aligned with other sectors. Opportunities for joint community awareness and education may also have been missed.

### 3.15 Community aspects

The project appears to have stimulated a high level of community involvement, increased awareness of RE and eye health, and proactive direction and management of initiatives by key stakeholders, particularly schools. The visibility and impact of IEC activities has enhanced cooperation between school staff, parents and students; and reinforced the importance of regular eye checks, follow up and wearing spectacles regularly.

Project partners have been responsive to community attitudes about refractive error found in the research report, with a number of additional communication initiatives implemented to provide better community education and awareness. Early anecdotal evidence suggests that these initiatives are having a positive impact.

In District 9, HCMC, one teacher has established a core study group (taskforce) to learn about eye care in great detail, and act as peer educators. The group meets regularly in the school library and has researched additional information about eye care (including learning about Vision 2020). As a result, they did very well in the eye care competition, receiving 2<sup>nd</sup> prize.

School staff reported being very concerned about the prevalence of RE, and intend to work closely with teachers to ensure they are taking protective measures; specifically paying attention to students' location in class, lighting, and ensuring adequate rest breaks and more outside activities. There is potential for these initiatives to be supported by advocacy for the Department of Education to address these issues through official policy.

# 4. Lessons learned and recommendations

This section is organised by project components, followed by additional key themes.

### 4.1 Human Resource Development

• Project management training introduced a range of completely new concepts which are valuable for hospital staff, not only for this project, but for management within the hospital more generally. Consideration should be given to providing some additional support to further develop project management capacity at Hanoi Eye Hospital (possibly integrated into a different

FHF project). Project management training should be included in future projects, ensuring adequate time provision to cover all topics in sufficient depth.

- The 'soft skills' of counselling and communication for doctors is an important component of supporting community awareness-raising. There was high demand for this training. Future projects should include an appropriate allocation for this training.
- Training for district and commune level staff was appropriate and relevant. However, decentralising services to the district level and increasing the role of district and commune level services in referral networks is challenging and will require strong ongoing support. Close clinical supervision, support and ongoing follow up should be provided to ensure quality is maintained as services are transitioned.
- Training for school staff (both nurses and teachers) is important to support high quality, regular RE screening and follow up, and to ensure students wear glasses as prescribed.

## 4.2 Infrastructure development

- Equipment and supplies provided by the project were generally appropriate and are being used as intended.
- Future projects would benefit from more detailed needs assessments with stakeholders to understand differences in local context and determine infrastructure needs accordingly.

### 4.3 Disease control

- The rate of students forgetting and losing spectacles in HCMC is quite high, accounting for 21/86 students; 24.4%. The project management board should enhance health education to students so that they wear spectacles more regularly, and do not forget or lose spectacles.
- The quality of screening and refraction achieved in this project, and its longer term impact, has the potential to be undermined by the variable quality of glasses available from private optical shops, as they are not currently regulated by the Ministry of Health. Consideration should be given to advocating for policy measures at the national level to regulate the quality of private services.
- The simplified VA chart developed in HCMC has been helpful for ensuring students receive screening as needed, and for supporting students to recognise when they need to seek further assessment. In line with the plan by the HCMC Eye Hospital, the simplified VA chart should be provided as a downloadable file (with instructions for use) that can be used by all schools throughout the country.
- FHF should also consider disseminating details of the chart and its use among other blindness prevention organisations and similar childhood blindness prevention programs in other countries. If possible, a downloadable file should be made available through the FHF website or other easily accessible means.
- The mid-term evaluation was very helpful for checking the quality of screening and refraction, particularly in Hanoi. The findings and recommendations had a significant impact on improving quality.
- The project provides value for other provinces to learn and apply as they do such projects in community. Lessons learned from this project should be disseminated to support this.

## 4.4 Operational research

- The operational research was suited to the needs of stakeholders and the findings have informed program activities.
- Research was very useful and used in both Hanoi and HCMC to inform key aspects of the project in both cities. It represented good value for the funding expended, and is likely to have a long term influence.

- The findings of the research should be reviewed and disseminated more widely to the international prevention of blindness sector to add to the body of knowledge about community attitudes towards childhood blindness and refractive error.
- The research should be reviewed to identify findings which may align with advocacy efforts and other policy objectives outside the prevention of blindness and eye health sector. For example, more outdoor time for children not only supports eye health, it also supports child health and development more generally and supports prevention of non-communicable diseases).
- Both the mid-term and final evaluations were highly valued by project partners. Each provided a number of lessons learned that can be applied to future planning. Many of the recommendations from the mid-term evaluation had been implemented.

## 4.5 Advocacy - communication and awareness raising

- As the demand for IEC materials exceeded what the project was able to supply, consideration should be given to ways in which IEC materials can be made more widely available possibly through use of downloadable files which services can have printed.
- FHF may also consider one-off support to provide an additional run of materials.
- Some schools are attempting to be proactive about ensuring they support protective measures for student vision, such as increased outdoor time, proper lighting and adequate rest breaks. Additional advocacy with the Department of Education to introduce policy initiatives would have a greater impact beyond individual school initiatives, and would boost community awareness.

## 4.6 Decentralisation of refraction services to district level

- The project has strengthened the capacity of eye health providers at all levels, and provides a replicable model for other provinces.
- Different models were used in each city (in Hanoi, the project covered 15 districts but without follow up; in HCMC it covered 6, but provided ongoing follow up). Differences in the quality of refraction services between each city are at least partially attributable to the different approaches. HEH was able to directly control refraction quality, which necessarily meant bypassing district level services.
- Future projects should consider variations between different districts in terms of capacity. The project partners were able to adapt to the context in this project, but effectiveness could be improved if there is more information available at the project outset. The assumptions that it would be the district level hospitals and health stations which were most likely to have the capacity to carry the project proved to be incorrect in some instances. Although the project partners were able to adapt accordingly during the course of the project, it would have been helpful to more closely monitor this and adjust the design at the outset.
- Although the outcomes of using different project models in the 2 cities impacted on refraction service quality, it also provided valuable lessons for future projects. There are advantages and disadvantages to each approach.
- HCMCEH should ensure attention, support, follow-up and monitoring in screenings and spectacle providing for students in the coming years until the districts taking on refraction services and optical dispensing can work on their own.
- Strong clinical supervision, support and ongoing follow up are required to ensure quality standards are maintained when services are developed at the district level.
- This project is helping to further develop a high quality and affordable optical service in HCMC. This has a number of flow-on benefits: it provides increased income opportunities for the services, and is also likely to indirectly raise standards in the private sector resulting from the increased competition.
#### 4.7 Intersectoral collaboration

- This project has demonstrated the potential to utilise the existing relationship between the education and health systems to increase awareness and develop referral pathways for services, and better integrate effective eye care with school health screening programs.
- Childhood blindness projects are likely to have some cross-over and common objectives with general child health and development projects. Future initiatives in this area should ensure collaboration with non-eye health sector agencies.

#### 4.8 Accessibility, barriers and equity

- The project has increased accessibility to services and helped stimulate planning by project partners to ensure ongoing access.
- Barriers to service are being addressed effectively, within constraints.
- Disabled students and children residing in orphanages have been reached by this project through the universal screening approach. If possible, monitoring should be undertaken by project partners in future initiatives regarding accessibility to service provision for children in schools for disabled students, and for children residing in orphanages. Consideration should be given to developing allocated funding mechanisms for this if needed and available. These may include service cross-subsidisation or targeted fundraising.
- Future childhood blindness projects should further explore and document potential cooperation arrangements with sources of funding support. The project partners in Hanoi utilised the national child sponsorship fund to assist low income families to access services, while in Ho Chi Minh City, schools accessed a parent-initiated study motivation fund and attempted to raise funds from within the school community to assist children unable to afford spectacles. Documenting these approaches may provide valuable lessons for other provinces.
- To assist in the development of cross-subsidisation schemes from spectacle sales, FHF should provide international case studies of similar schemes to project partners if available. Such examples may be sourced from published and/or grey literature. Examples would not necessarily need to be aimed only at children, as any service providing refraction and optical services is likely to cater to both adults and children.

#### 4.8 Follow up support and impact assessment

- There are encouraging signs that the models built through this project will be carried forward and further developed by the project partners following the completion of the assistance provided by this project. Planning is underway for further development of services at the district level in both Hanoi and HCMC, led and supported by the project partners.
- It would be useful for FHF to do a brief post-implementation impact assessment. (While no further funding will be available specifically for this project, the impact assessment could be undertaken with minimal funding, especially if integrated into other project visits). This assessment would provide a better picture of sustainability, and identify additional challenges in longer-term planning and implementation.

# 5. Conclusion

#### **5.1 Effectiveness**

The project has met or exceeded almost all project outputs, and the intended project objectives have been achieved. Services are generally of high quality; where quality needs to be improved, technical capacity and planning are in place to achieve this. Lessons learned for decentralisation of services to the district level are being incorporated into planning for ongoing decentralisation. Services are easily accessible and generally affordable, although ongoing attention will be needed to ensure equitable access, especially for the poor.

This purpose of the project to strengthen the delivery of high-quality, affordable, accessible services for children aged 0-15 across 14 districts in Hanoi and 6 districts in Ho Chi Minh City has been achieved. Ongoing support will be needed to consolidate this achievement and ensure continued strengthening of services.

## **5.2 Efficiency**

The project has adhered to the original workplan and budget. Funding and resourcing were adequate and appropriate for the needs of the project. The quality of the outputs is of a high standard, and contributes to achievement of the project purpose as designed.

## **5.3 Relevance**

The objectives of the project have remained consistent with the beneficiaries' requirements, both enhancing and extending planning for ongoing service development. The project is aligned with Vietnam national prevention of blindness plans, and particularly the need to address childhood refractive error. Project partners have responded to the needs of specific target groups, and addressing these needs is integrated into strategic planning for future expansion of eye care services.

#### 5.4 Impact

The project has appears to have made a substantial contribution towards reducing the prevalence of avoidable childhood blindness and child visual impairment in Vietnam, both through strengthening services in the two largest cities, and providing a model from which lessons learned can be applied to developing services in other provinces. Training provided through this project has diffused beyond the training participants to have a wider impact on community attitudes and awareness, particularly among school staff. The training and equipment provided to the Hanoi Eye Hospital has developed the capacity of the hospital to treat paediatric eye conditions, and enhanced its reputation as a high quality referral hospital.

## 5.6 Sustainability

There was evidence by both project partners and services at the district level of planning for the benefits of the project to be maintained and further expanded, taking into account lessons learned during this project. The project worked within existing structures, and developed services which provide additional opportunities for revenue generation.

#### **5.7 Management**

Project management was strong within FHF, between FHF and project partners, and between project partners and other stakeholders. All project stakeholders were responsive to changes in context and requirements throughout the period of the project, as well as to findings and recommendations from the mid-term evaluation and operational research. Communication between different stakeholders was good, and ensured outputs not only met project targets, but were of a high quality.

#### 5.8 Partnership aspects

There is a strong relationship between FHF and the two implementing partners. The project resulted in a number of innovations developed by partners and supported by FHF. These include the simple VA charts for schools and painted murals on schools about eye care. The implementing partners have a good relationship with district and commune health services, as well as school staff, and were able to work collaboratively to ensure the project reached intended beneficiaries effectively.

#### **5.9 Community aspects**

There was a high level of community engagement and involvement, particularly by school staff. School communities demonstrated increased awareness of refractive error and childhood blindness issues, and were responsive and proactive about implementing measures to support screening. The engagement of district and commune level health services was enhanced, although potential exists for this to be further strengthened.

# **Appendix 1: Terms of reference for evaluation**

# TERMS OF REFERENCE FOR THE FINAL EVALUATION OF THE VIETNAM URBAN CHILDHOOD BLINDNESS PREVENTATION PROJECT

August 2012

#### 1. INTRODUCTION

The Fred Hollows Foundation (FHF) plans to conduct a final evaluation of the Vietnam Urban Childhood Blindness Prevention Project (The *Project*), which operates in Hanoi Capital and Ho Chi Minh City (HCMC). The project is funded by Standard Chartered Bank through the "Seeing is Believing" program, for 3 years from 2010 to 2012.

The final evaluation will be conducted over a period of 11 days in November 2012 and will involve desk assessment, field work for stakeholder consultation and data collection as well as final report production. The final evaluation team will be composed of FHF staff and an independent external consultant, who has experience in both community ophthalmology programs and project evaluation.

At the end of the evaluation, a report will be produced containing the key project results and recommendations for future directions and strategies for FHF to contribute to the prevention of avoidable blindness and achievement of the VISION 2020: The Right to Sight goals in Vietnam.

#### 2. BACKGROUND

Blindness and visual impairment remain significant public health issues in developing countries, including Viet Nam, with childhood blindness an area of particular concern. A Rapid Assessment of Avoidable Blindness (RAAB) undertaken in 2007 by the Vietnam National Institute of Ophthalmology (VNIO) reported a national prevalence of blindness of 3.1% among those aged over 50 years. The main causes of blindness identified include cataract (66.1%), posterior post pathology (10%), glaucoma (6%) and corneal opacity (5.7%).

Uncorrected Refractive Error (RE) is the most common eye health problem among children in Vietnam with the RAAB identifying an increased prevalence of RE (up from 2.5% in 2002 to 10-25% in 2007), particularly among school age children. Significantly higher rates of RE are found in urban areas.

A recent survey conducted by the Vietnam Institute of Science and Education on RE in school children (December 2008) also revealed a high prevalence of RE for school

children of all grades including in primary school (18.67%), secondary school (23.47%) and high school (32.68%). This survey also confirmed the higher incidence of RE among school children in urban areas (26.14%) when compared with those in rural communities (14.44%). Additional studies in 2008, conducted by Ho Chi Minh City Eye Hospital (HCMCEH), across a sample of 10,000 high school children in HCMC found that many of those with RE did not wear spectacles or, where spectacles had been issued, ongoing lens correction had not been conducted.

Although data is limited, other paediatric eye diseases (such as strabismus, ptosis and amblyopia) are emerging eye health challenges requiring a long term management plan as identified in the Vietnam National Prevention of Blindness (PBL) Plan. In 2007, there were 1,021 child eye surgeries done at the VNIO and 3,240 at HCMCEH. In 2008 this increased to 1,555 and 4,521 surgeries respectively.

In 2008, a national PBL plan was made by VNIO, which outlines specific policies and interventions to address childhood blindness, including: screening for RE amongst children aged 6 to 15 (with 11-15 years being the initial target group); human resource development in RE through training centres; joint advocacy initiatives between the Ministry of Health and the Ministry of Education and Training.

With a view to contributing towards reducing the prevalence of avoidable childhood blindness and child visual impairment in Hanoi and Ho Chi Minh City, this Urban Childhood Blindness Prevention Project, developed by FHF in partnership with Hanoi Eye Hospital and HCMC Eye Hospital, is designed to deliver high-quality, affordable, accessible eye care services for children aged 0-15 for 3 years (2010 - 2012) in Hanoi and Ho Chi Minh Cities as project areas.

The key project partners are: Standard Chartered Bank, the Primary funder through the "Seeing is Believing" Program managed by the International Agency for the Prevention of Blindness- FHF (Coordinating Agency); Provincial People's Committees and Departments of Health in Hanoi and Ho Chi Minh Cities (Authorising Agencies) and the Eye Hospitals in Hanoi and Ho Chi Minh Cities (Implementing Agencies). Technical and training support to the Project has also been offered by the VNIO.

#### 3. **PROJECT DESCRIPTION**

**The Project** <u>Goal</u> is: to make a substantial contribution towards reducing the prevalence of avoidable childhood blindness and child visual impairment in Viet Nam.

**The Project** <u>Purpose</u> is: to strengthen the delivery of high-quality, affordable, accessible eye care services for children aged 0-15 across 14 districts in Hanoi and 6 districts in Ho Chi Minh City.

The Project Objectives are:

Component 1:	Human Resource Development - Capable eye care personnel capacity at tertiary, secondary and primary levels.			
Objective:	To strengthen the capacity of eye health providers at the tertiary, secondary and primary levels to effectively diagnose and treat childhood-related eye conditions, with a focus on RE.			
Component 2:	Infrastructure Development			
Objective:	To improve child eye care treatment infrastructure in Ha Noi and HCMC through provision of essential equipment.			
Component 3:	Disease Control – Prevention, treatment and follow-up			
Objective:	To reduce the burden of blindness and improve eye health in children through screening, referral and treatment.			
Component 4:	Operation Research –			
Objective:	To undertake research in project areas to improve the available childhood blindness information resource.			
Component 5:	Advocacy – Communication and awareness raising			
Objective:	To increase awareness and knowledge of childhood-related eye care among local communities and government authorities through eye health education and advocacy.			

# 4. OBJECTIVES AND SCOPE

The objectives of the final evaluation is to assess the project results against the intended objectives, any potential outcomes and its contribution to the overall Vietnam National Prevention of Blindness, especially the reduction of the avoidable childhood blindness in 2 big cities.

The final evaluation should include an assessment of the following:

- **Effectiveness:** The extent to which the individual project objectives and outputs have been achieved and their contribution to the achievement of the overall program purpose. This should also include an assessment of the quality, accessibility and affordability of the implemented eye services.
- *Efficiency:* A measure of how economically resources/inputs (funds, expertise, time, etc) have been converted to results.

- Relevance: The extent to which the objectives of the project have remained consistent with the beneficiaries' requirements, PBL plans and country needs (i.e. to the operating context). This should also focus on equity, and how the project responded to the needs of specific target groups - the poor, children, women, and people with a disability.
- Impact: Beyond the individual project achievements, the extent to which the project has contributed to the overall Vietnam National Prevention of Blindness (PBL) Plan.
- **Sustainability:** The potential for continuation of benefits from the project after its completion.
- Management: A review of project management procedures including the effectiveness of project partner coordination, project reporting, monitoring and evaluation systems, project planning and budget management.
- Partnership aspects: Assess partnership relationship between major project stakeholders, and how this supported the implementation of planned activities.
- Community aspects: Assess the community aspects in term of the involvement of the district & commune health workers, school teachers & school health staff, any attitude changes, community awareness, participation and ownership as the result of the project.

In the assessment, the final evaluation should also identify the factors which have contributed to the project successes, and areas of weakness that have impeded progress; and make recommendations for the future program orientation based on the lessons learnt.

## 5. METHODOLOGY & APPROACH

The evaluation should include the following:

- Desk review of all relevant project documentation and other materials such as any commissioned research findings, policy documents and national and provincial level strategy documents
- Interviews and discussions with relevant personnel from FHF and project partners
- Interviews and discussions with program beneficiaries and other relevant stakeholders

- Site visits
- Preparation of a report which addresses the objectives of the evaluation, draws out lessons learned, and presents findings and recommendations to FHF
- Submission of a final evaluation report, reflecting comments and feedback received from selected staff from FHF

It is suggested that the final evaluation adopts a participatory approach to involve key stakeholders in the evaluation process. This will foster a culture of learning through seeking to produce information about a project's achievements and lessons learnt that is of value to stakeholders. A participatory approach involves collaboration between stakeholders and beneficiaries, throughout the planning and conduct of the evaluation. Key methods include: Desk review of project documentation; qualitative and quantitative data gathering; focus-group discussions and interviews; and general observation.

The project team of the FHF Vietnam team will provide necessary support to provide context, documentation and will coordinate the field visit schedule.

## 6. EVALUATION TEAM

The final evaluation will be led by an independent external consultant, who has experience in both community ophthalmology projects and project evaluation. The independent external consultant acts as the Team Leader and is responsible for the planning and delivery of the evaluation, reports and recommendations. The project team of FHF Vietnam will provide necessary support to context, documentation, interpretation if needed, and will coordinate the field visit schedule.

The international consultant should have the following skills:

- Evaluation Team Leader experience.
- Knowledge and experience of VISION 2020.
- Knowledge and experience of community eye health or programs focused on blindness prevention.
- Knowledge and experience of community/international development programs, including in Vietnam.
- Demonstrable experience in monitoring and evaluating public health programs and eye health programs, including the development and use of quantitative and qualitative data collection tools and participatory evaluation methods.
- Strong analytical skills.
- Excellent report writing skills.

## 7. INDICATIVE TIMETABLE

It is expected that the final evaluation will be conducted over a period of 11 **days** (approximate) in November 2012, including project site visits to selected areas. The final specific timetable will be finalized when the International Consultant is selected.

Activities	Duration	
Desk Review of Project Documentation	2 days	
Evaluation Plan Production	1 day	
Field Review and Consultations	5 days	
Draft Report Production	2 days	
Final Report Production, incorporating feedback from FHF	1 days	
Total	11 days	

A suggested schedule for the final evaluation will involve:

#### 8. CONSULTANCY SERVICE:

The evaluation Team Leader will be required to undertake the following tasks:

### **Desk Assessment of Project Documents**

The evaluation Team Leader will review the following key project documents over a period of two days

- PDD/Proposal and attachments
- Partnership Agreements, such as Memorandum of Understandings (MoUs) and Annual Partnership Agreements (APAs).
- FHF Quarterly Progress Report
- SCB IV Six-Monthly Progress Reports
- PDD, Mid-Term and Final Evaluation Reports of the SCB Project Phase II, III and IV.
- National planning docs etc.

#### **Evaluation Plan Production**

The evaluation Team Leader will produce an Evaluation Plan in consultation with FHF Vietnam over a period of two days. The Evaluation Plan will elaborate on these TOR and will represent the agreement between the parties on how the evaluation will be conducted.

The Evaluation Plan will include: a field review schedule; list of persons to participate/consult during the evaluation; and the key evaluation approaches and

methodologies, including questionnaires (and/or compile appropriate questions and discussion points) to guide discussions during Field Review consultations.

### Field Review and Consultations in Project Locations

The proposed Field Review schedule is as follows:

Day	Field Review Activities						
Day 1	Visit Hanoi Eye Hospital						
	Meet and Interview the Project Management Board members, eye						
	doctors.						
	Visit selected district/commune health center						
	Meet commune health workers/teachers						
	Meet eye patients as children treated by project, children with R						
	received glasses granted by the project						
Day 2	Travel to HCMC in morning						
	Visit HCMC Eye Hospital (afternoon)						
	Meet and Interview the Project Management Board members, eye						
	doctors						
Day 3	Visit selected district/education office						
	Meet school health personnel teachers						
	Meet children with RE treated by project (glasses provision)						
	Meet the families whose children receive the project benefits						
	Travel to Danang						
Day 4	Debrief Session.						
	Travel back to Hanoi						

The final project visit schedule will be finalized with the inputs from the International Consultant

#### Draft and Final Evaluation Report Production (3 days)

The final evaluation report, containing evaluation results and recommendations will be prepared by the evaluation Team Leader. The production of this report will include facilitating and incorporating comments, and feedback from the evaluation team members and project partners. The draft report will be produced over a period of two days and will be submitted to FHF for comments and feedback.

The evaluation results and lessons learnt will then be shared with the local partners.

#### Suggested Report Format:

- Table of Contents
- Glossary/Acronyms and Abbreviations
- Acknowledgements

- Executive Summary
- Introduction/background
- Approach and methodology, including:
  - List of documents reviewed
  - Evaluation schedule
  - Evaluation techniques
  - Evaluation team members and participants
  - A list of persons consulted
  - Methodology for data analysis
- Evaluation findings, including:
  - Effectiveness
  - Efficiency
  - Relevance
  - Impact
  - Sustainability
  - Management
  - Partnership aspects
  - Community aspects
- Lessons learnt and recommendations
- Conclusion
- Appendices ( if needed)

#### 9. MANAGEMENT AND REPORTING ARRANGEMENTS

- The Evaluation Team will report to FHF's Vietnam based Operations Manager, supported by the Sydney-based Vietnam Program Coordinator.

- All reports must be written in English and provided in the requested templates and in electronic format (Microsoft Word).

#### **10. CONFIDENTIALITY**

All discussions and documents, including tender documents, relating to this ToR will be treated as confidential by the parties.

#### **11. INSURANCE**

Any consultants involved in this evaluation will be required to have in place insurance arrangements appropriate to provision of the requirements in this ToR including travel insurance.

#### 12. OTHER

The Fred Hollows Foundation strongly condemns all forms of child abuse and categorically states that it is unacceptable in any circumstance. The Foundation is committed to ensuring a safe environment and culture for all children with whom we come in contact during the course of our work. All members of the Evaluation Team will be required to comply with the FHF Child Protection Policy and sign the

Child Protection Code of Conduct.

# Appendix 2: Executive summary of project mid-term evaluation

The evaluation was conducted from 17 November to 25 November 2011 with four days dedicated to reviewing documentation and planning, and five days to field-site visits in Hanoi and Ho Chi Minh City (HCMC). The evaluation was conducted by a team of two external consultants and four Fred Hollows Foundation staff.

The Urban Childhood Blindness Prevention Project was developed in partnership with Hanoi Eye Hospital and the HCMC Eye Hospital, and is funded by the Standard Chartered Bank through the global 'Seeing is Believing' project. The project has been designed to deliver quality, affordable, and accessible eye-care services for children aged 0-15 for three years (2010 - 2012) in Hanoi and Ho Chi Minh City and intends to contribute towards reducing the prevalence of avoidable childhood blindness and child visual impairment by strengthening the delivery of high-quality, affordable, accessible eye care services. The total population in the areas covered by the project (15 districts in Hanoi and six districts in Ho Chi Minh City) is estimated at approximately 5,100,000, of which the project is working towards covering approximately 1,310,000 people (children from 0 - 15 years old). Of this figure it is expected that 783,800 school children will be screened for refractive errors during school screening activities and that an estimated 1,400,000 (50 per cent of total children in two cities) will be reached through broad health-promotion campaigns.

The project objectives are as follows:

- To strengthen the capacity of eye health providers at the tertiary, secondary and primary levels to effectively diagnose and treat childhood-related eye conditions, with a focus on refractive errors.
- To improve child eye care treatment infrastructure in Hanoi and HCMC through provision of essential equipment.
- To reduce the burden of blindness and improve eye health in children through screening, referral and treatment.
- To undertake research in project areas to improve the available childhood blindness information resource.
- To increase awareness and knowledge of childhood-related eye care among local communities and government authorities through eye health education and advocacy.

The evaluation team summarised the results of the evaluation as follows:

- Effectiveness The project is addressing clear needs that were identified through a process of reviewing experience and lessons learned by partners and FHF, and the services being provided have been appropriate and relevant. The evaluation identified some issues of quality of screening and glasses that could be more closely monitored and improved.
- Efficiency The project has worked closely to the proposed budget and timeframe. The activities were being completed in a timely manner and there were no noted delays that would affect the implementation of the project.
- Relevance The project is relevant and meets the needs of the target population. It also supports the Ministry of Education and Training's policy to screen children's vision, the National Blindness Prevention Strategy, the HCMC Blindness Prevention Strategy, and Vietnam's commitments in the Global Initiative for the Elimination of Avoidable Blindness Action Plan (2006-2011.)

- Impact The activities appear to have a long-term impact in terms of supporting vision, and performance, at school and improved knowledge of the importance of wearing glasses and having eyesight checked.
- Sustainability The project has established a level of sustainability by working with city-level hospitals and within their established structure. At the same time, some activities were not designed for long-term sustainability, especially the one-time provision of glasses. The provision of equipment to the Hanoi Eye Hospital and the HCMC district hospitals has opened the opportunity to establish new services on a fee-for-service basis, which increases sustainability of the services.
- Management The FHF management of the project was strong and well connected with the two primary partners the Hanoi and HCMC Eye Hospitals. As monitoring and follow-up could be improved, the FHF staff could be more involved at the district level, but it is also important to ensure the eye hospitals manage according to their structure, fostering further sustainability.

Based on the findings and conclusion of the evaluation, the evaluation team produced the following, selected recommendations to the project and for future Fred Hollows Foundation projects:

- Human Resource Development
  - Further refractive error training should be conducted to various project stakeholders.
  - Training teachers in HCMC should be considered.
  - The hospitals health and administration staff should be trained to recognise that other services and the private sector compete with them.
- Infrastructure Development
  - This project, and future projects, should conduct needs assessments with stakeholders to determine further infrastructure needs and provide necessary support accordingly.
- Disease Control Prevention, treatment and follow-up
  - Screening, the provision of glasses, and the use of glasses, should have greater followup and monitoring.
  - Monitoring could determine if children are being referred to surgery from all districts (in Hanoi) and if trained staff are being retained or replaced when trained staff are moved to a new location.
  - The project should ensure the quality of glasses through more rigorous examinations (in Hanoi.)
  - There should be concise selection criteria for the teachers to use when selecting students to receive glasses.
  - Future projects should consider reaching a smaller number of schools and districts with more follow up and greater coverage of quality glasses.
  - There should be greater involvement of the teachers to provide information and counsel on the need and use for glasses.
- Operational Research
  - The project should collect data on prevalence or refractive error, student vision, quality of glasses, and other available data from the project to collate and analyse.
- ✤ Advocacy, communications, awareness raising, and policy
  - The project should consider developing an advocacy strategy with target audiences.

- The project should identify schools that are successfully providing glasses, and they are being used, to model for other schools and ensure the experience is shared.
- Behaviour-change communications and health information through media channels, mass organisations and other appropriate venues should be considered for community knowledge.

Appendix 3: Executive summary of research report 'Attitudes of parents, students and teachers towards glasses use in Hanoi and Ho Chi Minh City'.

# Appendix 4: Documents provided and reviewed for the final evaluation

- 1. SCB Phase IV FHFVN Funding proposal
- 2. Mid term evaluation report, Jan 2012
- 3. Survey research report '*Attitudes of parents, students and teachers towards glasses use in Hanoi and Ho Chi Minh City*'. Research commissioned as part of component 4 of this project.
- 4. Report evaluating the effectiveness of communication activities for this project (draft version, Vietnamese)

HCMC project documentation:

- 5. Project document for Vietnam Urban Childhood Blindness Prevention Project in Ho Chi Minh City SCB Phase IV, 2010-2012
- 6. MOU between HCMC Dept of Health and FHF
- 7. FHF-HCMC EH annual partnership agreement 2010
- 8. FHF-HCMC EH annual partnership agreement 2011
- 9. FHF-HCMC EH annual partnership agreement 2012

Hanoi project documentation:

- 10. Project document for Vietnam Urban Childhood Blindness Prevention Project in Hanoi SCB Phase IV, 2010-2012
- 11. MOU between HCMC Dept of Health and FHF
- 12. FHF-HEH annual partnership agreement 2010
- 13. FHF-HEH annual partnership agreement 2011
- 14. FHF-HEH annual partnership agreement 2012

Progress reports:

- 15. Six month narrative progress report Jan-Jun 2010
- 16. Six month narrative progress report Jul-Dec 2010
- 17. Six month narrative progress report Jan-Jun 2011
- 18. Six month narrative progress report Jul-Dec 2011
- 19. Six month narrative progress report Jan-Jun 2012
- 20. Six month narrative progress report Jul-Dec 2012
- 21. Quarterly progress report Apr-Jun 2011

# **Appendix 5: Guiding questions for evaluation interviews**

Note: It is intended that interviews will be semi-structured. The questions listed below are suggested as a starting point for discussion and to triangulate information provided by different stakeholders and in project reports. Significant new themes which emerge during initial interviews will be incorporated into subsequent interviews.

#### FHF project staff (individual interviews and/or group discussion)

- Record role/involvement of each staff member in project, including start date for working on this project
- General/introductory discussion:
  - Overall key achievements of project impact, quality, changes in the way services are delivered
  - Crucial factors for success
  - Key challenges
  - How challenges were addressed/resolved
  - Unanticipated impacts of the project (positive and/or negative)
  - Key learnings from how this project has been implemented that can be applied elsewhere (within Vietnam, within FHF, by other PBL agencies)
  - o Expectations and ideas for future projects
- Specific issues for discussion:
  - o Review of project outputs against plan (numbers and discussion of quality)
  - o Review of recommendations from mid-term evaluation
  - Project management arrangements
  - Relationship with SCB
  - Reflection if you were doing the project again, would you do anything differently?

#### Project Management Board (HEH & HCMC EH)

- Record role/involvement of each staff member in project, including start date for working on this project
- General/introductory discussion:
  - Overall key achievements of project impact, quality, changes in the way services are delivered
  - $\circ \quad \text{Crucial factors for success}$
  - Key challenges
  - How challenges were addressed/resolved
  - Unanticipated impacts of the project (positive and/or negative)
  - Key learnings from how this project has been implemented that can be applied to other PBL and/or health projects
  - o Recommendations for future activities
- Specific issues for discussion:
  - o Feedback about project management training received (Hanoi)

- o Review of baseline service quality indicators and quality improvement targets
- Project management arrangements
- Expectations of project how well did the project meet expectations?
- Reflection how has the project impacted your work practices?
- Additional topics:
  - Planning for future initiatives
  - o Clinical supervision
  - Accessibility of services/potential barriers and how these are currently addressed, and/or planning to address these in the future
  - Any changes to project as a result of mid-term evaluation, research report
  - Reflection: if you could do the project again, what (if anything) would you do differently?

#### <u>VNIO</u>

- Overall perspective of the project
- Significant achievements of the project
- Key challenges
- Contribution to achievement of national PBL plan targets
- How will the outcomes of this project fit with future initiatives (eg collaboration with BHVI/ICEE to train optometrists)?
- Recommendations for future projects (no commitment by FHF)

Additional topics:

- Outcomes/lessons learned from both the mid-term and final evaluation how have/will these be disseminated?
- Influence of the project on planning
- Unanticipated/unexpected lessons learned

#### Doctors/nurses (District Health Services, HEH)

- Reflections on the training received
- Expectations of the project (how well were these met?
- What were the significant achievements of the project?
- What are the most significant challenges?
- How has the project impacted on the quality and quantity of services offered?
- How has it impacted on clinical practice?
- How do you measure quality of services?
- Have there been any changes in the cost of services?
- What clinical supervision and review arrangements are in place? (for both trainees and trainers)
- If using equipment supplied by the project:
  - How confident do you feel about using it?
  - Who is responsible for maintenance?
  - Have you there been times when the equipment is not available?

Additional topics (with District Health Services Directors/admin staff):

- What planning is in place to continue to develop services?
- Are you aware of the research into attitudes towards glasses? If so, what influence has it had on how you provide services and information?

#### Equipment maintenance staff

- How confident do you feel about maintaining the equipment?
- Have there been any problems with the equipment?
- What arrangements are in place to support the equipment maintenance (especially beyond any warranty periods)

#### District/Commune health workers

- Overall responsibilities (% devoted to eye care)?
- Reflections on the training provided
- Services provided before and after training
- How are services organised and provided?
- How confident do you feel about providing services and referral?
- How confident do you feel providing services to children following your participation in the project?
- What clinical supervision and quality assurance mechanisms are in place?
- What is the impact of project involvement on your work practice?
- Collaboration with other service providers
- Overall number of beneficiaries reached
- Uptake of services, barriers to uptake?
- What follow-up is provided to promote uptake?
- Any unexpected impacts/consequences of the project?
- Can you describe some case studies?

#### Teachers/School health personnel

- Describe involvement in the project
- How would you describe the impact of the project on your knowledge of refractive error and eye health generally?
- How has what you have learned in the project impacted on your attitude to students? (explore if they have a greater understanding of factors that may be impacting on a student's ability to study)
- What % of children would you estimate take up services offered?
- What do you see as the most important barriers to uptake?
- What has been the impact of students who have benefited from the project?
- Any unexpected impacts/consequences of the project?
- Can you describe some case studies?
- For teachers/staff who have not participated in training:
  - What do you know about the project?
  - What do you see as the greatest challenges/barriers for the project?
  - What is your understanding of refractive error and eye health (prevalence, severity, impact on learning)

Beneficiaries – children and families

- What was communicated to you about the project before, during and after?
- What was your involvement?
- Describe your story what was the result of screening, any referrals, uptake/follow up?
- What has been the impact on your life?

Additional topics covered with parents:

- What was your knowledge/awareness of RE and eye health issues prior to your child's involvement in the project?
- What were the sources of information for you to learn about RE and eye health?
- What do you know about RE (risk factors, management)?
- Did your child already have eye problems before they were screened as part of this project?
- If so, what action did you take?
- Would you have been able to afford glasses if they were not provided as part of this project? If so, how much would be affordable?
- Where will you take your child for future eye services and exams?
- How does your child feel about wearing glasses?
- (If glasses supplied by project are the first time your child has worn glasses) What changes have you noticed since your child started wearing glasses?

Additional topics covered with children:

- Which IEC materials have you been exposed to?
- Describe what you know about RE and eye health.
- What can you do to protect your eyes?
- What were the sources of information for you to learn about RE and eye health?
- (If provided glasses by project) How do you feel about wearing glasses? What is different for you since you started wearing glasses?
- If you have a problem with your eyes, what action would you take?

Funder – CEO, Standard Chartered Bank, HCMC

Project management:

- How satisfied are you with communication about the project?
- How would you rate the opportunities and benefits offered for SCB participation in project events?
- What has been the impact of participation in project events for SCB staff?

Overall project quality:

- What are you overall impressions of the project?
- How well do you consider the project has met SCB expectations?
- What do you consider the most significant achievements of the project?
- What has been the contribution of the project to SCB community investment and the Seeing is Believing initiative?

Lessons learned:

• Are there any particular successes or areas needing improvement that should be noted for future FHF collaboration with SCB?

# Appendix 6: Field review and consultations

Day	Activities			
Day 1: Mon 12 Nov	Interviews and discussion with FHF staff; review and refine guiding			
	framework			
Day 2: Tue 13 Nov	Visit Hoang Mai District, Hanoi			
	<ul> <li>Meet and interview staff, parents and students at Linh Nam</li> </ul>			
	secondary school, undertake vision screening			
	<ul> <li>Meet and interview commune and district health staff</li> </ul>			
	Visit Hanoi Eye Hospital			
	<ul> <li>Meet and interview PMB, doctor and nurse trained in project</li> </ul>			
Day 3: Wed 14 Nov	Visit Gia Lam District, Hanoi			
	<ul> <li>Meet and interview Director of district health station, nurse, doctor and commune health workers</li> </ul>			
	<ul> <li>Meet and interview parents, staff, teachers and students at Dong</li> </ul>			
	Du Primary School, undertake vision screening			
	Visit Hanoi Eye Hospital			
	<ul> <li>Interview head of equipment maintenance department</li> </ul>			
	Wrap up meeting with Vice Director and Project t Officer			
Day 4: Thu 15 Nov	Travel to HCMC			
	Visit District 9, HCMC			
	<ul> <li>Meet and interview Director of district hospital, admin director, nurse and doctor</li> </ul>			
	<ul> <li>Meet and interview head of preventative medicine centre</li> </ul>			
	<ul> <li>Meet and interview Vice Director, teachers, nurse and students at</li> </ul>			
	Hoa Lu Middle School, undertake vision screening			
Day 5: Fri 16 Nov	Visit District 12, HCMC			
	<ul> <li>Meet and interview Director, doctor and nurse of district hospital</li> </ul>			
	and Vice Director of preventative medicine centre			
	<ul> <li>Meet and interview Principal, teachers and school nurse of Tran</li> </ul>			
	Quang Khai Junior High School, plus Dept of Education Health			
	Coordinator			
	Meet and interview Principal, nurse and students at Nguyen Hien			
	Junior High School, undertake vision screening			
Day 6: Sat 17 Nov	Evaluation debriefing session			
22 Nov, post site visit	Telephone interview with SCB CEO, HCMC			

# Appendix 7: List of people consulted

FHF

- Vietnam: project staff as listed above; Dr Huynh Tan Phuc, FHF Vietnam Country Manager
- Australia: Bridget McAloon, Vietnam Program Coordinator; Veronica Bell, Program Development Effectiveness Manager; Beatrice Iezzi, Research Coordinator

VNIO

• Dr Nguyen Chi Dung, Assistant Director and Vice Director of the Centre of Training and Community

Hoang Mai District, Hanoi

Linh Nam Secondary School

- Vice Director of school
- 2 teachers (did not participate in project training)
- School nurse (participated in project training)
- Parents of 2 children who have received glasses
- Approximately 15 students interviewed, plus approx 170 students screened (total 341 for both schools in Hanoi)

District Health Station

• 4 commune doctors (2 trained by the project)

Hanoi Eye Hospital

Patients:

- Mother of 5 year old girl currently undergoing post-surgery rehabilitation for strabismus
- Mother of 7 year old girl having post-surgery check for internal strabismus (no rehabilitation required)
- Parents of 4 year old boy currently undergoing pre-operative treatment for strabismus Staff:
- Dr Trinh Thi Bich Ngoc, Vice Director of Hospital
- Dr Nguyen Thi Hanh Huyen, Project Officer (HEH coordinator for this project)
- Finance Director
- Nurse and doctor trained through project
- Head of equipment maintenance department

Gia Lam District, Hanoi

**District Health Station** 

- Director of health station
- 4 commune health workers
- 1 nurse
- 1 doctor

Dong Du Primary school

- 3 parents (1 mother, 2 fathers) of 3 children who have received glasses from the project
- Principal (participated in project training)
- 3 teachers (1 participated in training)
- Small group of students interviewed, plus approximately 170 students screened (total 341 for both schools in Hanoi)

District 9, HCMC District Hospital

- Director of Hospital
- Administration Director
- 1 Nurse (trained as refractionist by project)
- 1 doctor
- Preventative Medicine Centre
- Director also a refractionist (not trained by project)

Hoa Lu Middle School

- Vice Director of school
- 2 teachers (one of whom is also a parent of a child who received glasses)
- School nurse
- Small group of students interviewed, plus 176 students screened

#### District 12, HCMC

**District Hospital** 

- Director of Hospital
- Vice Director, Preventative Medicine Centre
- 1 doctor (general)
- 1 nurse (trained as refractionist by program)
- Tran Quang Khai Junior High School
- Principal
- Dept of Education Health Coordinator
- 3 teachers
- School nurse

Nguyen Hien Junior High School

- Principal
- 1 Nurse
- Small group of students interviewed, plus 134 students screened

#### HCMC Eye Hospital

- Dr Can, Vice Director of Outreach
- Dr Phi Duy Tien, Vice Director of Hospital, Director of Outreach
- Dr Duyen, Doctor
- Dr Tran Huy Hoang, Project Officer at the Hospital
- 1 Nurse

SCB (22 November phone interview with Marita Hefler)

• Mr Louis Taylor, CEO SCB Vietnam

# Appendix 8: Vietnam system for assessing visual acuity

The following chart, supplied by the VNIO, provides approximate equivalents between the Vietnamese system
for assessing visual acuity (Monoyer scale) with the Snellen scale.

20 ft	6 m	Snellen	Monoyer	LogMAR	Lines
20 / 200	6 / 60	0.1	1 / 10	+1.0	1
20 / 160	6 / 48	0.125		+0.9	2
20 / 125	6 / 38	0.16		+0.8	3
20 / 100	6 / 30	0.2	2 / 10	+0.7	4
20 / 80	6 / 24	0.25	3/10	+0.6	5
20 / 63	6 / 19	0.32		+0.5	6
20 / 50	6 / 15	0.4	4 / 10	+0.4	7
20 / 40	6 / 12	0.5	5 / 10	+0.3	8
20 / 32	6/9.5	0.63	6/10 7/10	+0.2	9
20 / 25	6 / 7.5	0.8	8 / 10 9/	<b>10</b> +0.1	10
20 / 20	6 / 6	1.0	10 / 10	0	11