

INTERNATIONAL EYE FOUNDATION

"SEEING 2000"

Increasing the Quality and Quantity of
Ocular Surgery in Children
to Ameliorate Childhood Blindness

Annual Report No.2
November 1, 1996 - October 31, 1997

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The following annual report is the submission for the International Eye Foundation (IEF) project, "Seeing 2000"- Increasing the Quantity and Quality of Child Ocular Surgery. This report covers the period November 1, 1996 - October 31, 1997.

I. SUMMARY

"Seeing 2000" seeks to support and strengthen national and international NGOs and charity hospitals in developing countries to expand and improve their clinical and surgical services to blind and visually impaired children in underserved areas. The program's goal is to increase the quality and quantity of ocular surgery performed on children to ameliorate childhood blindness, supported by Congressionally earmarked funds mandated for this purpose.

Two rounds of proposal solicitations have been received, including one round during this reporting period. Over 100 Request for Application (RFA) packets were sent each round to regional, national and international organizations and individuals. In total, 35 proposals have been reviewed by the independent "Seeing 2000" Review Board. Twenty-one proposals have been recommended and approved for funding, including two separate proposals resulting in consecutive years of funding for Lady Reading Hospital/Hayatabad Medical Complex. Eighteen proposals have been funded for the maximum limit of \$25,000. Funding for proposals submitted by Universidad Catolica de Chile, Foresight/Australia and International Centre for Eye Health were partially funded for \$11,000, \$15,000 and \$17,000 respectively.

Of the 21 funded proposals, four projects have completed their grants, two projects have not yet started their grant funded activities with the 14 remaining projects in varying stages of grant completion. Urban, peri-urban and rural populations are served by "Seeing 2000" grant funds with almost all projects serving a combination of populations. The majority of grant recipients are private or non-governmental eye care organizations. Hybrid organizations, with elements of both state and private organizations, also exist. "Seeing 2000" projects have been funded in 13 countries spanning Eastern Europe, Oceania, Africa, Asia, and Central and South America.

"Seeing 2000" grant funds have supported the purchase of medical and surgical equipment for pediatric ocular activities, specialized training for pediatric ophthalmologists and paramedical staff, outreach activities and less often, subsidized surgery for children who would otherwise not receive surgery. The use of grant funds for equipment and training is viewed as philosophical preferable in terms of development. However, subsidization of surgery is necessary in some instances because of need, in terms of patient need and the need to increase the overall awareness of pediatric ophthalmology within the project area. "Seeing 2000"'s devotion to the increased quantity and quality of child ocular surgery has provided the stimulus for many projects to actively seek out the hidden pediatric eye patient. With very little available data on the causes and prevalence of childhood blindness, many

projects have discovered that the need for pediatric eye care is much greater than anticipated. Several projects now have established, or are in the process of establishing, pediatric eye clinics separate from general eye care services.

The implementation of "Seeing 2000" activities vary widely from project to project. However, the majority of projects have two similarities, an emphasis on patient outreach and an emphasis on the training of medical and paramedical staff. The Lumbini Eye Care Project sends 2-person outreach teams house-to-house and to schools to screen for eye problems in children. Children identified with ocular problems are referred to the hospital or clinic. Aravind Eye Hospital's outreach activities include examining children enrolled in the Integrated Child Development Scheme (a state-run preschool program), at eye camps, and in visits to schools. Aravind Eye Hospital's inclusion of pediatric eye examinations into their eye camps, known for identifying senile cataracts, is uncannily apt due to the local custom of grandparents as child caretakers. Projects in Bulgaria, Zimbabwe, Papua New Guinea and Egypt target schools for the blind in identifying children with blindness that can be surgically corrected and children with low vision needs.

The overwhelming majority of "Seeing 2000" project sites have ophthalmic residency programs. L. V. Prasad Eye Institute, Lumbini Eye Care Project and Aravind Eye Institute also provide surgical training opportunities to those from neighboring, lesser developed countries such as China and Tibet. Upgrading the skills of paramedical staff is another mutual concern of "Seeing 2000" projects.

Round 1	Asia	Africa	Latin America	South America	Eastern Europe	Oceania	TOTAL
proposals reviewed	6	3	4	1	2	1	17
proposals funded	4	2	3	1	1	1	12
Round 2	Asia	Africa	Latin America	South America	Eastern Europe	Oceania	TOTAL
proposals reviewed	9	4	3	1	0	1	18
proposals funded	5	2	0	1	0	1	9
Projects not yet started	1	0	0	0	0	1	2
Projects Completed	2	1	0	0	0	1	4
Current projects	6	3	3	2	1	0	15

II. BACKGROUND

In our effort to reach out to a wide range of deserving pediatric eye health care projects, the RFA was mailed to the World Health Organization's Prevention of Blindness Partnership Committee (WHO/PBL), Member Agencies and Observers. IEF requested that they forward the RFA to appropriate regional and national eye care organizations. "Seeing 2000" actively seeks to work with all types of organizations including private eye care institutions, state supported hospitals, non-governmental organizations serving urban, peri-urban and rural populations. Distributing the RFA through WHO/PBL was determined by IEF as reaching deserving institutions that may not be known to IEF. Information regarding "Seeing 2000" was distributed in an impartial manner to all requesting at the American Academy of Ophthalmology meetings in October 1996 and October 1997.

The first round of project proposals was solicited in early 1996. Seventeen proposals were submitted and reviewed with nine projects beginning August 1, 1996. Three additional projects, after providing further detailed information, were approved and began February 1, 1997. The second round of proposals was solicited in early 1997. Eighteen proposals were submitted and reviewed with 9 projects approved for funding. Four of these 6 projects began June 1, 1997 and two projects elected to start at a later date due to commitments of their project directors. Minutes of the Review Board meeting held April 4, 1997 are found in Appendix 3. An additional three proposals were approved for funding, including a proposal submitted by Lady Reading Hospital, Pakistan. Lady Reading Hospital was funded during the first round and was the first project to submit a second proposal.

All proposals meeting the review deadlines are evaluated by the Review Board. Proposal requirements state that successful proposals must respond to at least two of the three Primary Objectives (Objectives 1-3), and to the Secondary Objectives (Objectives 4-6), when the secondary objective contributes to increasing child ocular surgery.

Project proposals are evaluated and scored by Organizational Capability and Proposed Personnel (40 points), Project Concept and Management Plan (40 points), and Fiscal Management and Budget (20 points). Successful proposals may meet only two of the three primary objectives. Most proposal activities address more than two objectives while only a few projects address all six objectives.

The Primary Objectives are:

1. Increase by 20% or more the number of children receiving needed surgery for correctable ocular conditions in the areas being served.
2. Increase by 50% or more the number of children under age six years receiving eye examinations in the areas being served by a project. This may include conducting a survey of facilities housing blind and visually impaired children using the WHO protocol and methodology.
3. Identify at least one ophthalmologist or clinical officer within each project area and enhance their capacity to treat children clinically and surgically through additional

training.

The Secondary Objectives are:

4. Increase by 10% or more the number of visually impaired children enrolled in blind schools who can be visually rehabilitated (spectacles, low vision aids, etc.) and integrated into a regular environment/school.
5. Support existing efforts to increase awareness of ocular disease in children, its management and referral, in the medical communities of the regions being served through primary eye care workshops.
6. Support existing efforts to increase awareness of ocular disease in children among parents and the general public through education/promotion activities and local media.

Preference is given to proposals:

1. demonstrating existing infrastructure or linkage with WHO NGO Partnership Committee network or work in collaboration with a PVO/NGO.
2. demonstrating cost-sharing and complementary funding from an institution, or other sources.

"Seeing 2000" projects report technical and financial activity quarterly to IEF according to guidelines established in the "Seeing 2000" manual provided to projects by the IEF. Technical reports are reported by objective using tables provided in the manual. Financial reports comprise:

1. Quarterly Transaction Sheet (including receipts)
2. Quarterly Expense Summary
3. Cover Letter with the signature of Project Director

Original signed documents, supporting documentation (time sheets, etc.) and receipts must accompany these forms.

III. IEF PROGRAM ACCOMPLISHMENTS BY QUARTER

"Seeing 2000" program activities occur both at the individual project site and at IEF/Headquarters. The following accomplishments, by quarter, highlight the "Seeing 2000" activities initiated at IEF/Headquarters.

December 1, 1996 - February 28, 1997

A modified Request for Application (RFA) was sent out to 118 individuals and organizations in mid-December. The RFA was revised to simplify the application process. The revised RFA is provided in Appendix 1.

A contract letter was created to accompany the "Seeing 2000" subgrant agreement. The content of the subgrant agreement did not change. A sample of the contract letter is provided in Appendix 2.

The Review Board approved three new projects. Four proposals, reviewed during the first round of proposal applications, were asked to provide additional information. These four projects were:

- Hospital Roosevelt, Guatemala
- Hospital "Rodolfo Robles V.", Guatemala
- Hospital Elias Santana, Dominican Republic
- International Network for the Prevention of Blindness in Africa for a project in the Ivory Coast.

Revised proposals were received from 3 projects:

- Hospital Roosevelt
- Hospital "Rodolfo Robles V."
- Hospital Elias Santana.

All three resubmitted proposals were recommended for funding by the Review Board. In this instance, the Review Board did not physically meet but submitted their recommendations by written correspondence.

The three newly approved projects initiated "Seeing 2000" activities February 1, 1997. These projects received more inclusive information in their financial reporting guidelines. The revised guidelines were forwarded to all ongoing "Seeing 2000" projects. They can be found in Appendix 3.

March 1, 1997 - May 31, 1997

The Review Board met, April 4, 1997 in Charleston, South Carolina during the Pediatric Ophthalmology and Strabismus meeting, to present their funding recommendations on the 17 "Seeing 2000" proposals submitted to the International Eye Foundation during the second funding round. Six projects were recommended for funding and another 3 projects were requested to supply additional information prior to a funding recommendation. The Minutes of this meeting are found in the Appendix 4.

Site visits were made to 5 on-going "Seeing 2000" projects. Projects visited were:

- Mount Sion Centre for the Blind, Papua New Guinea
- Aravind Eye Hospital, India
- L. V. Prasad Eye Institute, India
- Lady Reading Hospital, Pakistan
- Lumbini Eye Care Project, Nepal.

The recently approved project at Tilganga Eye Centre, Nepal was also visited. These trip reports are contained in Appendices 5 and 6.

June 1, 1997 - August 31, 1997

Four projects approved during the April 4 Review Board meeting began their "Seeing 2000" activities. These projects are:

- Al Shifa Eye Hospital, Pakistan
- Gwanda Provincial Hospital, Zimbabwe
- Instituto de Educacion y Prevencion en Salud Visual, Peru
- Tilganga Eye Centre, Nepal.

The blind school project in Egypt and the retinopathy of prematurity project at the All India Institute of Medical Science, India delayed their project start dates.

The Review Board provided their funding recommendations on four proposals during a conference call on July 24, 1997. Proposals submitted with additional information were received from:

- Fundación para el Desarrollo de la Mujer Salvadoreña (FUDEM), El Salvador
- Layton Rahmatulla Benevolent Trust, Pakistan
- Foresight - Australia / Port Moresby General Hospital, Papua New Guinea.

A proposal for a second year of "Seeing 2000" funding, from Lady Reading Hospital in Pakistan, was also reviewed.

Proposals from Layton Rahmatulla Benevolent Trust, Pakistan; Foresight - Australia / Port Moresby General Hospital, Papua New Guinea; and Lady Reading Hospital were recommended and accepted for funding. Lady Reading Hospital initiated their second year of "Seeing 2000" on August 1, 1997.

All active "Seeing 2000" projects received a packet containing contact information and a project description of the other "Seeing 2000" projects. This was done to facilitate networking and sharing of information between "Seeing 2000" projects. Most projects have E-mail capabilities and can easily and readily communicate with each other. A technical article regarding pediatric ophthalmic practices was included along with a request for articles or information that could then be distributed to all "Seeing 2000" participants. The contents of this packet can be found in Appendix 9.

September 1, 1997 - November 31, 1997

Two projects initiated their "Seeing 2000" projects on September 1, 1997. These projects were Layton Rahmatulla Benevolent Trust, Pakistan and the Blind School Project in Egypt. The project submitted by Foresight - Australia / Port Moresby General Hospital, Papua New Guinea postponed their project start date until March 1998.

A site visit to the "Seeing 2000" project in Bulgaria was made September 17-24, 1997. This trip was planned to coincide with training, supported in part by "Seeing 2000", conducted by American pediatric ophthalmologist, Dr. Robert Sargent. The trip report is found in Appendix 7.

The "Seeing 2000" Program Coordinator attended the American Academy of Ophthalmology meeting in San Francisco, October 25-29, 1997 to meet with the 13 international project representatives attending the Academy. "Seeing 2000" representatives were invited to the IEF and Society of Eye Surgeons sponsored Breakfast held October 28, 1997. Prof. M. Daud Khan, director of the "Seeing 2000" project at Lady Reading Hospital in Pakistan, presented his project's activities during the Breakfast program.

Present at the Academy meeting and meeting with the Program Coordinator were:

- Dr. Natchiar, Aravind Eye Hospital
- Dr. G. N. Rao, L.V. Prasad Eye Institute
- Prof. M. Daud Khan, Lady Reading Hospital

- Dr. Suzanne Gilbert of the Seva Foundation representing the Lumbini Eye Care Project
- Dr. Moses Chirambo, Lions SightFirst Eye Hospital
- Dr. Petja Vassileva, Bulgarian Eye Foundation
- Dr. Arturo R. Quevedo, Hospital Roosevelt
- Dr. Ana Maria Illescas, Hospital "Rodolfo Robles V."
- Dr. Juan Batlle, Hospital Elias Santana
- Dr. Sanjay Dhawan, Gwanda Provincial Hospital
- Dr. Luz Gordillo, Instituto de Educacion y Prevencion en Salud Visual
- Dr. S. Ruit, Tilganga Eye Centre
- Dr. Haroon Awan, Al Shifa Eye Hospital

Two additional packets of articles and information were sent to "Seeing 2000" projects. One packet contained journal articles received from Dr. G. N. Rao of L.V. Prasad Eye Institute. These articles were written by L. V. Prasad Eye Institute staff and concerned pediatric ophthalmic issues. The second packet contained a journal article concerning retinopathy of prematurity written by Dr. Luz Gordillo, Instituto de Educacion y prevencion en Salud Visual in Peru. This second packet also contained information that was collected during the American Academy of Ophthalmology meeting concerning a wide variety of technical and nontechnical topics. The content of these informational packets is contained in Appendices 10 and 11.

IV. PROJECT ACHIEVEMENTS REPORTED BY OBJECTIVES

Individual projects report to IEF quarterly using a format of standardized tables including narrative description of problems, achievements, unexpected benefits and plans for the following quarter. This format, with minimal emphasis on narrative, was chosen to facilitate reporting for non-English speakers. All reports are prepared in English.

Projects report quarterly and the reporting quarter is established by the "Seeing 2000" subgrant grant agreement start date. Project accomplishments by objective are shown below, projects are grouped according to their start dates. Projects are strongly encouraged to report all activities addressing "Seeing 2000" objectives, whether stated or not in their project proposal. All projects address two of the first three objectives.

Many projects have not provided, or are not able to provide, baseline data. Reasons for this vary from underdeveloped health information systems, data collected previously was not separated by age and other but unexpressed reasons. Also, age standards vary from country to country for 'child' and 'adult'. The "Seeing 2000" project has adopted the classification established by the World Health Organization for a child less than 16 years of age.

1. *Increase by 20% or more the number of children receiving needed surgery for correctable ocular conditions in the areas being served.*

The goal of "Seeing 2000" is to increase the quality and quantity of clinical and surgical eye care of children. All projects, except the International Centre for Eye Health's Survey of Blind Schools in South Africa, address Objective 1.

Projects report the number and types of procedures performed and stratify by age (0 to <6 years of age, 6 years to >16) and sex. The table below shows the total of procedures reported by each project quarterly. The project objectives are shown in italics.

Cycle A projects starting 8/1/96

	Baseline 1 year	8/96 to 10/96	11/96 to 1/97	2/97 to 4/97	5/97 to 7/97	total (% change)
Aravind Eye Institute, India	2,040	0	640	485	632	1,757 (-14)
Bulgarian Eye Foundation	<i>40</i>	2	5	11	16	34 (-15)
Universidad Catolica de Chile	33	6	14	8	15	43 (+30)
L. V. Prasad Eye Institute, India	1,654	494	561	513	615	2,183 (+32)
Lions SightFirst Eye Hospital, Malawi	not provided	141	163	108	120	532
Lumbini Eye Care Project, Nepal	304	54	96	119	108	377 (+24)
Lady Reading Hospital, Pakistan	333	188	532	472	356	1,548 (+465)
Mount Sion Centre for the Blind, Papua New Guinea	55	15	20	80	46	161 (+293)
TOTAL	4,459	900	2,031	1,796	1,908	6,635

Note: Bulgarian Eye Foundation reported a 3-month baseline figure of 10 surgeries and this was extrapolated to 40 surgeries per year.

Excluding data from Malawi, there was a 48% increase in the number of surgeries.

- Aravind Eye Hospital chose not to report surgical activity during the first quarter of their 24-month grant because this time was spent training their outreach workers.
- The Bulgarian Eye Foundation faced great difficulties in implementing project activities due to extreme political and economic instability, including periods when businesses were shut down in late 1996 and early 1997. Project design emphasized training and an increase in surgeries is expected to be shown after completion of the training phase.
- The Universidad Catolica de Chile, seeking to increase the awareness of pediatric ophthalmology as an ophthalmic subspecialty, performs primarily cataract and glaucoma surgery.

- L. V. Prasad Eye Institute as the result of purchasing specialized anesthesia equipment is able to more safely and efficiently operate on children and babies at an earlier age.
- Outreach activities at the Lions SightFirst Eye Hospital in Malawi is hoped to secure the parents' permission to operate on children already identified with eye disease.
- The Lumbini Eye Care Project, despite difficulties in obtaining anesthesia equipment and anesthetist services in their rural location, nevertheless, achieved their objective of a 20% increase in surgery.
- Lady Reading Hospital's dramatic increase in surgeries is due to their emphasis on treating pediatric patients and more diligent record keeping.
- Mount Sion Centre for the Blind has increased their pediatric surgical volume because of outreach activities emphasizing pediatric eye examinations and the stability of having an ophthalmologist available locally and not only in the capital.

Cycle B starting 2/1/97

	Baseline	2/97 to 4/97	5/97 to 7/97	8/97 to 11/97
Hospital Roosevelt, GUATEMALA	not provided	110	65	89
Hospital "Rodolfo Robles V.", GUATEMALA	332	150	123	
Hospital Elias Santana, DOMINICAN REPUBLIC	not provided	24	20	
TOTAL		284	208	89

Delays in receiving quarterly reports at IEF and confusion over project start dates have stalled the collection of accurate data. The signed subgrant agreement had a February 1, 1997 start date but due to normal start up delays reports received from Hospital Roosevelt and Hospital "Rodolfo Robles V." sent their initial reports with data collected beginning March 1, 1997. It has taken longer than anticipated to reorganize the reporting schedule. In addition, there have been delays in communication due to changes in project directors and appropriate contact information.

Cycle C starting 6/1/97

	baseline	6/97 to 8/97
Al-Shifa Eye Hospital, PAKISTAN	321	46
Gwanda Provincial Hospital, ZIMBABWE	not provided	12
Instituto de Educacion y Prevencion en Salud Visual, PERU	not provided	3
Tilganga Eye Centre, NEPAL	72	22
TOTAL	393	83

Note: Tilganga Eye Centre reported a 3-month baseline figure of 18 surgeries and this was extrapolated to 72 surgeries per year.

Quarterly reports covering the period 9/97 - 11/97 are due at IEF on 30 days following the end of the reporting period or on December 31, 1997.

Cycle D starting 8/1/97

	baseline	8/97 to 10/97
Lady Reading Hospital/Hayatatabad PAKISTAN	1,548	126

- Lady Reading/Hayatatabad is beginning the second year of their multi-year phased plan of institutionalizing pediatric ophthalmic care. Their reduced number of surgeries is due to the relocation of the Department of Ophthalmology to a new facility.

Cycle E starting 9/1/97

	baseline	9/97 to 11/97
Blind School Project, EGYPT	not yet reported	not yet reported
Layton Rahmatulla Benevolent Trust	737	167

PAKISTAN		
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Quarterly reports covering the period 9/97 - 11/97 are due at IEF on 30 days following the end of the reporting period or on December 31, 1997.

2. *Increase by 50% or more the number of children under age six years receiving eye examinations in the areas being served by a project. This may include conducting a survey of facilities housing blind and visually impaired children using the WHO protocol and methodology.*

The second of the three Primary Objectives emphasizes early identification and treatment. Children with congenital eye disease (for example congenital cataract or congenital glaucoma) are much more likely to have a higher success rate of curable blindness when receiving treatment at an early age. The World Health Organization (WHO) protocol and methodology are recognized as a standard tool for assessing and evaluating pediatric vision.

Several projects show a remarkable increase in the number of eye examinations. Prior to "Seeing 2000", many projects did not emphasize recording the number of pediatric eye examinations performed nor did they emphasize the identification of ocular disease in children. Lady Reading Hospital has shown an increase in the number of examinations because of their newly created pediatric eye clinic and increased outreach activity oriented to children. Now, with detailed record keeping using computer databases instead of their previous manual system, they can accurately document their achievements. The outreach staff of the Mount Sion Centre for the Blind, due to "Seeing 2000", now actively seek out children for eye examinations.

The Lumbini Eye Care Project has three 2-person teams continually examining children by visiting house-to-house and visiting schools. This has been an extremely productive and low cost method to identify children needing medical, surgical or optical care. Children with problems are referred to the eye hospital or clinic depending on need.

Lions SightFirst Eye Hospital in Malawi has provided IEF a total number examined during the first project year but has not yet provided a breakdown by quarters 2,3 and 4.

Cycle A projects starting 8/1/96

	Baseline	8/96 to 10/96	11/96 to 1/97	2/97 to 4/97	5/97 to 7/97	total (% change)
Aravind Eye Institute, India	34,567	0	10,248	10,074	28,204	48,526 (+40)
Bulgarian Eye Foundation	128	20	28	109	1,015	1,172 (+916)
L. V. Prasad Eye Institute, India	1,141	294	262	287	335	1,178 (+3)
Lions SightFirst Eye Hospital, Malawi	not provided	2,646	not provided	not provided	not provided	21,404
Lumbini Eye Care Project, Nepal	not provided	439	20,589	37,566	29,435	88,029
Lady Reading Hospital, Pakistan	not provided	940	280	5,033	968	7,221
Mount Sion Centre for the Blind, Papua New Guinea	84	21	37	162	83	303 (+361)
South Africa	not provided	1,311	project completed	project completed	project completed	1,311
TOTAL	35,920	5,671	31,444	53,231	60,040	169,144

Note: When reported baseline figures have been of less than a year's duration, figures have been extrapolated to one year to provide a basis for comparison.

Cycle B starting 2/1/97

	Baseline	2/97 to 4/97	5/97 to 7/97
Hospital "Rodolfo Robles V.", GUATEMALA	158	226	182
Hospital Elias Santana, DOMINICAN REPUBLIC	not provided	577	326
TOTAL	158	803	508

Cycle C starting 6/1/97

	baseline	6/97 to 8/97
Al-Shifa Eye Hospital, PAKISTAN	not provided	216
Gwanda Provincial Hospital, ZIMBABWE	not provided	248
Instituto de Educacion y Prevencion en Salud Visual, PERU	not provided	42
Tilganga Eye Centre, NEPAL	1,587	611
TOTAL	1,587	1,117

Note: Tilganga Eye Centre reported a 3-month baseline figure of 387 examinations and this was extrapolated to 1,548 examinations per year.

Quarterly reports are due at IEF 30 days following the end of the reporting period. For example for the period 9/97 - 11/97, reports are due on December 31, 1997.

Cycle D starting 8/1/97

	baseline	8/97 to 10/97
Lady Reading Hospital/Hayatatabad PAKISTAN	7,221	983

Cycle E starting 9/1/97

	baseline	9/97 to 11/97
Layton Rahmatulla Benevolent Trust PAKISTAN	not provided	901

3. *Identify at least one ophthalmologist or clinical officer within each project area and enhance their capacity to treat children clinically and surgically through additional training.*

Pediatric ophthalmology is considered a new sub-speciality. Many regions do not have the personnel trained to address the needs of a pediatric ophthalmic program. Training of an ophthalmologist or a clinical officer to treat children clinically or surgically is considered an investment that will last long after "Seeing 2000" funds have been exhausted.

It is preferred that training be conducted regionally because training conditions will more closely resemble the actual working conditions as well as to keep training costs to the minimum. In Bulgaria, American pediatric ophthalmologists have conducted training workshops. The project in Chile, as well as several other projects, has appropriate trainers available within the project. However, other projects may not have appropriate training opportunities available regionally or may need a more advanced level of training. Generally, those receiving training outside the region will then become a trainer within their region.

Many projects provide pediatric ophthalmic training to their medical residents but have not included information on their activities because they are not receiving grant funds to support the training.

Group A

Bulgarian Eye Foundation

Dr. Rositza Lolova received 3 ½ months of training at Aravind Eye Hospital, a WHO Collaborating Center, under the supervision of American trained pediatric ophthalmologist Dr. Vijayalakshmi. Dr. Vijayalakshmi directs Aravind's "Seeing 2000" project. Additional "hands-on-hands" pediatric ophthalmic training was received in-country by 6 ophthalmologists representing different regions of Bulgaria. American pediatric ophthalmologist, Dr. Robert Sargent, presided over this training.

Universidad Catolica, Chile

Drs. Patricia Ortlieb and Marlene Vogel are receiving training on-site in pediatric ophthalmic surgical techniques by the project director, Dr. Hernan V. Iturriaga, and Dr. Eugenio Maul.

L. V. Prasad Eye Institute, India

Dr. B. Venkateshwar Rao participated in a one-year fellowship program in pediatric ophthalmology at Indiana University Medical Center with Dr. Eugene Helveston. The fellowship, funded by Orbis International, will be completed December 1997. Dr. B. V. Rao will then return to the Institute to participate and develop their pediatric ophthalmology program.

Lions SightFirst Eye Hospital, Malawi

Dr. Nkume Batumba completed a two-week Microsurgical Training in ECCE-IOL on-site, January 20-31, 1997 with Dr. Lemesurier of the Australian "Fred Hollows Foundation" and Dr. Chirambo. Dr. Batumba completed 12 hours of classroom instruction and one week of practical experience, including 5 cataract operations.

Mount Sion Centre for the Blind, Papua New Guinea

Alois Michael received eye nurse training during a 10-week course conducted by Mr. John Farmer, an optometrist from Australia. Mr. Michael with continuing working with the "Seeing 2000" project in an increased capacity.

A volunteer expatriate nurse has been receiving training under Dr. Lansingh's supervision. This could also be viewed as an unexpected benefit.

Group B

Hospital Rodolfo Robles V., Guatemala

Dr. Maria Eugenia Sanchez Rosal is taking a one-year Fellowship in Strabismus and Pediatric Ophthalmology at the "Dr. Rodolfo Robles V." Eye and Ear Hospital. She will complete this Fellowship July 31, 1998.

Group C

Al-Shifa Eye Hospital, Pakistan

Dr. Mubashir Jalis and Dr. Abdul Qayyum began their Pediatric Ophthalmology Fellowship at the Pakistan Institute of Ophthalmology/Al -Shifa Eye Hospital during the first quarter of their grant period and will continue their Fellowship during the life of the grant. They will participate in the project's on-going "Seeing 2000" activities.

Gwanda Provincial Hospital, Zimbabwe

Mr. Nkosana Maposa, Ophthalmic Nurse and Anesthetic Assistant based at the Eye Unit Gwanda, successfully completed a four week Pediatric Anesthesia Refresher Course at the Department of Anesthesia, United Bulawayo Hospitals, Bulawayo under the guidance of Dr. Rezai, Consultant Anesthetist and Head of Department. The course was specifically designed around the needs of Mr. Maposa. Mr. Maposa was trained as an Anesthetic Assistant 6 years ago and has subsequently trained as an Ophthalmic Nurse at Lilongwe, Malawi under Dr. Moses Chirambo.

Dr. Sanjay Dhawan took Pediatric Ophthalmology continuing education courses offered at the American Academy of Ophthalmology meeting in San Francisco, October 24-29, 1997. He attended 10 Instruction Courses relevant to pediatric eye care with funding from "Seeing 2000".

4. *Increase by 10% or more the number of visually impaired children enrolled in blind schools who can be visually rehabilitated (spectacles, low vision aids, etc.) and integrated into a regular environment/school.*

The intent of this objective was to increase the number of children in blind schools or other non-mainstream environments rehabilitated into a regular environment by surgical interventions. Blind schools surveys conducted by Dr. Clare Gilbert have shown that there are many children categorized as blind and unable to function in a regular environment who have eye conditions that can be corrected by surgery.

Despite careful consideration of appropriate indicators, achievements of this objective are much more complex than recording the number of blind children who can see after eye surgery. Low vision aids and mobility training are areas that are being addressed by "Seeing 2000" projects and provide an increased quality of life and improve vision. For example, the Centre for Sight Enhancement at the L. V. Prasad Eye Institute and the Mount Sion Centre for the Blind have specially trained staff working with low vision children. Quantitative indicators, as well as qualitative descriptions of activities, have not been able to fully measure project accomplishments. We are still working to identify most accurately how to measure these accomplishments.

Group A

Aravind Eye Hospital, India

Two hundred forty-five visually handicapped children were screened. Two hundred twenty-one children were categorized as total blind (no light perception) and 19 were undiagnosed. Nine children were scheduled for surgery and six children were diagnosed as normal.

L. V. Prasad Eye Institute, India

Two hundred seventy-five children were rehabilitated during the grant period through surgery, at the Center for Sight Enhancement and mobility training.

Lions SightFirst Eye Hospital, Malawi

Fifteen of the 22 children referred to the Lions SightFirst Eye Hospital underwent eye operations. Seventeen pairs of spectacles were distributed to children during vision screening at resource centers. One child with retinitis pigmentosa was enrolled at the resource center.

Mount Sion Centre for the Blind, Papua New Guinea

Identification and rehabilitation of blind and low vision children are continuing process at Mount Sion Centre for the Blind. Two children at the Mt. Sion hostel received rehabilitative surgery and now have useful vision. Increased screening activities have resulted in identifying those with other than visual disabilities and some of them are now in the process of rehabilitation.

Group C

Gwanda Provincial Hospital, Zimbabwe

Due to "Seeing 2000", a concentrated effort was made to screen all the children in the various blind schools in Matebeleland South Province. During the first quarter, 40 children from Blind Schools were screened as were 5 additional children identified by the Eye Unit and Mobile Unit. They are currently in various stages of treatment. There is now an on-going activity with referral back and forth between surgery, post-op follow up, low vision appliance dispensing, and essential Braille users. *Young adults in the 15 -19 year range with dense congenital cataracts have been operated on successfully by the Project. Others are benefitting from optical iridectomy and low vision devices.*

5. *Support existing efforts to increase awareness of ocular disease in children, its management and referral, in the medical communities of the regions being served through primary eye care workshops.*

Program objectives 5 and 6 address the issue of increasing awareness in both the medical community and the general public. Reporting these activities gives value to the time, energy and money projects devote to health education. Recording the number of eye examinations or the number of surgeries helps define what the project is presently doing. Increasing the awareness of ocular disease enhances the institutionalization and

sustainability of pediatric eye care projects.

Group A

Universidad Catolica, Chile

Outpatient Clinic's staff are receiving training to increase the number of referral patients.

Aravind Eye Hospital, India

Five "Seeing 2000" nurses received a special training class on Vitamin A deficiency (Bitot's spot, Xerosis) conducted by the Chief of Aravind Children's Hospital. Visiting orthoptists, Gisela Rademaker and Marianne Motlier, conducted theoretical and practical sessions for refractionists, orthoptists and doctors. The visiting orthoptists recommended the purchase of two series of videotapes (*Vision Screening for Children* and a *seven-part training series* from the American Orthoptic Council) for on-site training and these have been obtained with "Seeing 2000" funding.

Dr. Siddesh Kumar will complete his one-year pediatric fellowship, under the supervision of Dr. Vijayalakshmi in December, 1997.

L. V. Prasad Eye Institute, India

A total of 38 health professionals attended the Symposium on Childhood Blindness and Low Vision November 18-22, 1996 held at the L. V. Prasad Eye Institute. Twenty doctors, 8 clinicians, 8 rehabilitation specialists and two administrators attended the training presented by Dr. Clare Gilbert (International Centre for Eye Health, UK), Ms. Jugnoo S. Rahi, Department of Epidemiology, Institute of Child Health, UK) and Mrs. Janet Silver (Moorfields Eye Hospital and International Centre for Eye Health, UK).

The following journals submitted by the Project Director, Dr. Rao, were distributed to all "Seeing 2000" projects in September 1997. The articles were:

- Mitomycin C-augmented Trabeculectomy in Refractory Congenital Glaucoma (OPHTHALMOLOGY, Vol. 104, No. 6, June 1997)
- Visual Impairment in School Children in Southern India (Indian Journal of Ophthalmology 45:129-134, 1997)
- Results of Sutureless Wound Construction in Children Undergoing Cataract Extraction (Journal of Pediatric Ophthalmology and Strabismus 1996;33:52-54)
- Results of a Prospective Evaluation of Three Methods of Management of Pediatric Cataracts (OPHTHALMOLOGY, Vol. 103, No. 5, May 1996).

These articles are found in Appendix 10.

Lions SightFirst Eye Hospital, Malawi

Workshops for 70 Health Surveillance Assistants were conducted November 5-6, 1996 and December 3-4, 1996.

Lumbini Eye Care Project, Nepal

To increase the general awareness of eye problems, the project has sent informative letters to the 130 Village Development Committees (representing populations of 4,000 - 6,000), 58 High Schools and Lower Secondary Schools and 25 Health Posts.

Field outreach workers received a three-day refresher training course September 22-24, 1997. The training course consisted of: a review of reports; theoretical class with the topics of cataract, xerophthalmia, trachoma and red eye; a day in the hospital out patient department; and a field visit.

Lady Reading Hospital, Pakistan

Eight workshops were held with a total of 224 participants. The following workshops were held:

- Mini Workshop for Masters of Science Home Economics students (November, 19 1996)
- National Workshop of Childhood Blindness and Low Vision (November 4-24, 1996)
- Workshop on Primary Eye Care for Paramedics and Nurses (November 30 - December 2, 1996)
- 17th Lahore Ophthalmology 96 (December 13-15, 1996)
- Excimer Laser Keratectomy (December 26, 1996)
- Workshop on Primary Eye Care for General Medical Doctors (December 28, 1996)
- Workshop on the Integration of Primary Eye Care into Primary Health Care (December 30, 1996)
- One Day Workshop on Low Vision (January 2, 1997)

Mount Sion Centre for the Blind, Papua New Guinea

REESES, another rehabilitation branch of the Christian Brothers has conducted almost 10 courses, of 3 - 5 days, in various areas of Papua New Guinea based on the first draft of the Eye Care Manual being prepared by the Project Director, Dr. Van Lansingh.

The Eye Care Manual for Papua New Guinea is in its final stages of revision after being field tested. The first draft of this manual is contained in the attachment of the trip report to Papua New Guinea, Appendix 5.

Group B

Hospital Elias Santana, Dominican Republic

Visual acuity workshops and eye health care promotional activities have been conducted by the project. Between February and August 1997, there have been 7,271 participants.

Group D

Lady Reading Hospital/Hayatabad Medical Complex, Pakistan

Workshops in collaboration with the World Health Organization were conducted at Gilgit and Muzaffarabad during the first quarter. Teaching material prepared under "Seeing 2000" was distributed in the workshops.

A pediatric eye care facility was started at Mercy Hospital in Peshawar on October 4, 1997. Mercy Hospital, serving Afghan refugees, has no provision for eye services. An ophthalmic technician visits the hospital three times weekly and the children needing optical or surgical intervention are taken to the project site, Hayatabad Medical Complex (HMC). Children suffering from Vitamin A deficiency are brought to nearby HMC for provision of vitamin A.

6. *Support existing efforts to increase awareness of ocular disease in children among parents and the general public through education/promotion activities and local media.*

Group A

Bulgarian Eye Foundation

On-going press and television news conferences are held that stress the importance of early detection to prevent blindness. Examples of new articles can be found in the attachments of trip report, Appendix 7.

Lumbini Eye Care Project, Nepal

The Health Education message "Provide Dark Green Leafy Vegetables to Your Children, Save Sights for Future." is printed in the eye glass cases.

Lady Reading Hospital, Pakistan

Dr. S. Khabir Ahamad, ophthalmic resident at Lady Reading Hospital, is a staff writer for the local paper, *The Frontier Post*. Dr. Khabir writes columns focusing on health issues and interviews all visiting health professionals.

Mount Sion Centre for the Blind, Papua New Guinea

Health education lessons are an on-going activity in conjunction with their outreach screening programs. Three different schools have received presentations by Dr. Lansingh regarding common eye conditions.

Group C

Tilganga Eye Center, Nepal

Health Education on eye health was given to the schoolchildren and teachers at the school screening camps.

V. FINANCIAL REPORTING

To date, \$493,000 has been allocated to the 21 funded projects.

Detailed financial quarterly reports are expected at IEF/Headquarters 30 days after the end

of the reporting period on which the projects are reporting. Financial quarterly reports should contain a list of expenditures by approved budget line items with supporting documentation such as original purchase receipts and time sheets. An overall summary of line item expenses against the approved budget line items should also be included as a review of how the project is actually spending funds. Monthly summary reports briefly showing grant funds received and disbursed by the project (not by line item) is requested to show the status of grant funds available to the project.

The ability for projects to report in an accurate and timely fashion varies greatly. Some projects, primarily the large eye hospitals and institutes, have well developed administrative support systems that facilitate the reporting process. Others have cumbersome bureaucratic systems that inhibit timely reporting. Financial administration of the smaller projects tends to be the responsibility of a project director, an ophthalmologist with technical but not necessarily financial expertise.

Continued disbursement of grant funds is contingent upon clear and timely reporting, as stated in the subgrant agreement. Additional grant funds are not disbursed until sufficient documentation or clear financial reports are received and reviewed. Grant funds are given prior to expenses and not disbursed as reimbursement to expenses already incurred because many projects are not able to absorb the cost of "Seeing 2000" activities without grant funds. Grant funds are not disbursed on a set schedule. Funds are disbursed by request, briefly outlining the expenses, because of the dynamic nature of project activities.

VI. UNEXPECTED BENEFITS

"Seeing 2000" projects have received benefits, and benefited the community, in unforeseen ways. The following projects have reported these activities and we expect that many other unexpected benefits remain unrecorded but appreciated.

The recording of project achievements and accomplishments is believed to have been strengthened due to the requirements of "Seeing 2000" reporting. One positive role of "Seeing 2000" is its ability to work with projects in various stages of administrative development. The Bulgarian Eye Foundation and Lady Reading Hospital are strengthening their management of data as they make the transition from manually recorded data to computer database systems.

IEF hopes that the networking activity begun by information distributed by IEF to "Seeing 2000" projects will further expand, reveal and share the unexpected benefits reaped by the projects.

Lady Reading Hospital, Pakistan

A pediatric eye care facility was initiated by the "Seeing 2000" project at Mercy Hospital in Peshawar, October 4, 1997. This additional eye care site has increased the accessibility of eye care services for children. Mercy Hospital provides health care to Afghan refugees and prior to the "Seeing 2000" activities, Mercy Hospital had no provision for eye services. An ophthalmic technician from Lady Reading Hospital visits Mercy Hospital three days per week and children needing optical or surgical intervention are taken to the project site,

Hayatabad Medical Complex (HMC). Children suffering from Vitamin A deficiency are brought to HMC for provision of vitamin A.

Mount Sion Centre for the Blind, Papua New Guinea

Since receiving "Seeing 2000" funding, this project has received additional funding from the New Zealand government to purchase medical equipment and is in the final phases of review for a proposal submitted to Rotary International for the training of eye nurses. In addition, Goroka General Hospital, site of the project's clinical and surgical services, was named the second national training center with university recognition. Also, the institute of Medical Research is designing a Protocol to Compare Iodine vs. Antibiotics in Neonatal (Ophthalmia) Prevention. The prevention of "ophthalmia neonatorum", commonly known as conjunctivitis in the newborn, is a potentially blinding condition. The Project Director, Dr. Van C. Lansingh, credits their "Seeing 2000" grant as an impetus to these accomplishments.

LV Prasad Eye Institute, India

A newly built floor of the L. V. Prasad Eye Institute, dedicated to pediatric eye care, was officially opened December 1, 1997.

Bulgarian Eye Foundation, Bulgaria

The Bulgarian Eye Foundation (BEF) has capitalized on their international visitors through media coverage. Visitors are interviewed by the media and are able to support the BEF's goal of increasing the public's awareness of preventable and curable eye diseases. International visitors aid in establishing BEF as a viable Foundation. This in turn has facilitated BEF's networking with other established foundations such as the Foundation Future for Bulgaria. Confirming BEF's credibility seems to be an issue unique to Bulgaria as NGOs are a new phenomenon in the former Communist block countries.

Gwanda Provincial Hospital, Zimbabwe

Other regions in Zimbabwe have learned that the Gwanda Eye Unit will cater to children's eye problems on a priority basis and cases are arriving from Matebeleland North and Bulawayo. The Eye Units in Matebeleland North do not have general anesthesia facilities. The Gwanda Eye Unit at Gwanda Provincial Hospital is being informally recognized as a leading national center for pediatric eye care.

VII. PROBLEMS/STEPS TO OVERCOME PROBLEMS

The Request for Applications (RFA) were sent out in mid-December 1996, with a proposal application due date of April 1, 1997. The proposals were sent via a mailing service to reduce the cost of mailing 118 RFA packets, the majority of which were going overseas. IEF received notification from several projects in late March and early April that they had just received the RFA packets. Because packets were delayed, IEF may not have received the optimum number or quality of proposals. However, Foresight/Australia notified IEF that they received the packet late but were able to fax IEF a strong outline of a proposal. In an effort to be understanding and flexible, this proposal was reviewed April 4, 1997 with the other submitted proposals. It was determined that additional detailed information was necessary. After receiving additional information, this proposal

application and supporting documentation were again assessed by the Review Board and the proposal was recommended and approved for funding. This example highlights our need for flexible due dates.

"Seeing 2000" has sought to be accessible to all individuals and institutions seeking grants to provide pediatric clinical and surgical eye care and has sent proposal application packets to all those who requested. Several proposal applications did not demonstrate the level of technical understanding, responsibility, or accountability necessary to meet our review standards. IEF is considering incorporating more specific criteria into the application process to identify, more appropriately, institutions and individuals suitable as "Seeing 2000" partners.

There have been delays in receiving timely reports from some projects. Reasons for this vary from inadequate project support staff to project administrative difficulties and bureaucracy of national committees. The "Seeing 2000" Program Coordinator has worked to resolve these issues during site visits and phone, fax and E-mail communications. One project director, Dr. Moses Chirambo, has stated that he will actively look for a project administrator to handle his projects' reporting requirements. Other projects continue to have difficulty which may be due to hierarchical and bureaucratic problems and lack of defined roles of project staff.

Political upheavals, economic instabilities and nature have impacted one time or another on almost all of the "Seeing 2000" activities. Hospital employee strikes, prime ministers resigning, flooding, banks closing and hyper-inflation disrupt even the most organized and well-managed programs. "Seeing 2000" has tried to remain responsive to the projects by providing support and communication.

VIII. SUMMARY AND CONCLUSIONS

Since the first of the 21 "Seeing 2000" project activities were initiated, 7,592 surgical procedures have been performed on children. The number of children receiving eye examinations during this same period is 173,461. This increase in pediatric ophthalmic activity has stimulated ophthalmologists and ophthalmic residents to further their knowledge and skills in pediatric ophthalmic techniques through fellowship programs, workshops and seminars held nationally, regionally and internationally.

Projects have made a vigorous effort to identify blind children who can be rehabilitated surgically; the project in Egypt is devoted exclusively to serving children enrolled in blind schools. Projects are using innovative methods to increase the awareness of ocular disease in children by printing preventive and nutritional messages in eye glass cases, television interview programs, creation of local NGOs to support activities, newspaper stories and fundraising activities.

"Seeing 2000" has thus far been successful in increasing the awareness of pediatric ocular disease and the provision of medical and surgical treatment. We are now accumulating information on the issues, problems and causes of pediatric ophthalmic disease on a regional and country-specific level. Congenital cataract, congenital glaucoma and

strabismus have long been thought to be the primary concerns of pediatric ophthalmology and we are learning through "Seeing 2000" reporting that trauma to the eye is another major pediatric ophthalmic concern. It has been reported that trauma is the second leading cause of blindness in children in Pakistan and Papua New Guinea due to industrial and social activities. Though trauma is preventable, "Seeing 2000" activities currently do not address prevention because of its limited clinical and surgical scope.

Different indicators, used in the reporting tables, may enable us to more accurately assess the needs of pediatric ophthalmic programs by more clearly identifying the issues, problems and causes of pediatric ophthalmic disease. One limitation, thus far, that we have identified in our indicators is that no distinction is made in collecting congenital cataract or traumatic cataract data. Another refinement that we are considering is expanding data collection from the process orientation of reporting numbers (of surgeries, examinations, etc) to reporting that includes impact and outcome of activities through measurement of post operative visual acuity and post-operative functional ability. Refinement of our indicators will continue to evolve as we learn more about pediatric ophthalmic issues and problems. "Seeing 2000" is finding the problems to be much more diverse than originally anticipated.

Pediatric eye surgery demands follow-up eye examinations, often under anesthesia, and repeat surgery. This is not due to lack of surgical skill but due to the physical development of the patient. Resources are necessary to support patient compliance and care where distance, childcare and transportation may interfere with the ability of children to return to the hospital or eye clinic. Data collection and reporting methods need to incorporate indicators that reflect the value of appropriate follow-up care. Quality assurance indicators and evaluations are being considered to further improve our understanding of the relationship between surgery, follow-up and optimal patient outcome.

In addition, though "Seeing 2000" emphasizes surgical intervention, we are aware that spectacles, low vision aids, and mobility training are needed as complimentary and cost-effective methods of improving vision and the quality of life for children. Presently we are doing very little to address the needs of children requiring low vision aids or even a pair of spectacles due to the strict nature of the intended grant funds. However, "Seeing 2000" projects have expressed a need and desire to provide spectacles, low vision aids, and mobility training as part of their activities. The scope of this problem has not yet been addressed but is under consideration and IEF will consider carefully a broadening of appropriate activities.

Anesthesia, anesthesia equipment and the anesthetist are important to providing quality clinical and surgical pediatric eye care. These elements, if weak or lacking, can greatly impact the quantity and quality of surgical care provided. Anesthesia equipment and the training of additional anesthetists have been key issues common to several projects. One project's entire funding, L. V. Prasad Eye Institute, supported the purchase of anesthesia equipment to safely provide care for very young infants. Children, once refused care at other hospitals and institutions, can now safely receive ophthalmic care at the L. V. Prasad Eye Institute.

The financial costs of pediatric eye care programs far outweigh those for adults. Methods to improve the cost-effectiveness of pediatric eye surgery may be a next area where

projects seek assistance. Several hospitals and institutes with "Seeing 2000" activities are leaders in the field of cost recovery and cost sharing systems and may be used as an informational resource for other projects.

The organizational capacity of institutions with "Seeing 2000" projects vary as widely as their organizational descriptions: private eye institutes and eye hospitals, charity hospitals, academic departments, local NGOs, international NGOs or a combination of the above. Resources available to "Seeing 2000", such as pediatricians, number and skill level of paramedical staff, administrative and managerial expertise have been informally identified. We hope to more clearly identify the organizational capacity necessary to provide appropriate pediatric ophthalmic care while not competing for the resources needed by adult ophthalmic services.

Site visits and the narrative provided in the quarterly project reports humanize the results, bringing to life the effect surgery can have on a child, his/her family and his eyesight. However, the measurement of the increase in surgical procedures, "Seeing 2000's" cornerstone, does not assess outcome measures. Improved methods of assessing surgical outcome and impact, including measurement of sight years restored, post-operative visual acuity and functional ability will help us to more clearly understand and define the impact and value of pediatric eye care.

IX. OUTLINE OF FUTURE ACTIVITY

"Seeing 2000" support from IEF/Headquarters to individual "Seeing 2000" projects will continue in the form of site visits, phone, fax and E-mail correspondence and informational packets. Other possible means of improving support and the sharing of information include expanding e-mail and web-site capabilities or the creation of an electronic bulletin board with issues pertinent to pediatric ophthalmology.

We will continue soliciting project proposals, evaluating funding recommendations from our independent Review Board and funding new projects. As the overall "Seeing 2000" project is at midterm, IEF is assessing the direction that the second part of the project will take. Issues to be reevaluated are: criterion for project acceptance; geographic region; scope of project including the number of beneficiaries; and innovation of project design including cost-effectiveness and financial sustainability concerns.

The technical reporting indicators will be reviewed and possibly revised to provide additional and more specific information, for example, separating congenital cataract procedures from traumatic cataract in recording surgical procedures. Also, we may include a question regarding whether any intervention is needed as a result of eye examination, objective two. These interventions could be classified as optical, surgical, medical or a combination. Currently we do not have any information regarding the categories of eye problems found during eye examinations. The development and recording of appropriate indicators for "Seeing 2000" technical reporting is seen as a method of improving and institutionalizing health information systems as well as improving the quality of the collected information.

The information already collected has identified needs that are not being addressed in the current scope and definition of "Seeing 2000". Quality assurance, blindness prevention, cost-effectiveness, spectacles, low vision aids and mobility training are clear needs of pediatric ophthalmic programs. IEF would like to enter into a dialogue with USAID to determine together acceptable means of broadening the range of "Seeing 2000" activities for the remainder of the Cooperative Agreement.

The following activities could be accomplished through a combination of grants to selected institutions capable of undertaking such activities and by direct collaboration with institutions. It is anticipated that \$50,000 - \$100,000 would be necessary to be reallocated for these purposes, with approval from USAID. This would result in approximately four less grants but could provide the opportunity to increase the financial and organizational capacity for pediatric ophthalmic purposes.

List of possible activities to incorporate into the second half of "Seeing 2000" program:

- Introduce Quality Assurance methods to 2-3 programs
- Evaluate 2-3 programs for organizational and financial sustainability
- Conduct cost-effectiveness of 2-3 of the strongest programs
- Identify and facilitate expansion of low vision services in 2-3 programs
- Develop and improve facilities for electronic sharing of information
- Evaluate post-surgical outcome measures, i.e., develop and test a Functional Ability questionnaire and Quality of Life questionnaire to determine impact/outcome of surgeries
- Conduct an international expert meeting/seminar on pediatric ophthalmology through the Task Force of the WHO/PBD Partnership Committee
- Develop case studies of 2-3 programs to further document results by regional and organizational capacity
- Conduct small scale operational research on cultural barriers to acceptance of childhood surgery

X. APPENDICES

- Appendix 1. Revised Request for Application
- Appendix 2. Revised contract letter
- Appendix 3. Additional finance and cash handling guidelines
- Appendix 4. Minutes of board meeting held April 4, 1997
- Appendix 5. Trip report Papua New Guinea, March 12-24, 1997
- Appendix 6. Trip report Asia, April 14-May 13, 1997
- Appendix 7. Trip report Bulgaria, September 17-24, 1997
- Appendix 8. Lancet article submitted by the International Centre for Eye Health
- Appendix 9. Information packet sent to all projects
- Appendix 10. Information packet sent to all projects
- Appendix 11. Information packet sent to all projects