

ANNUAL REPORT 2016



Belize Council for the
Visually Impaired



THE MISSION

The Belize Council for the Visually Impaired is a non-profit organisation committed, through a comprehensive programme, to prevent and cure blindness, restore sight and to rehabilitate and educate people who are blind to enable them to use their talents and abilities to live independent lives.

THE VISION

The Belize Council for the Visually Impaired's vision is of a Belize where no one is needlessly blind and those who are irrevocably blind are integrated as equal members in all aspects of society.

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A MESSAGE FROM THE EXECUTIVE PRESIDENT

Working with BCVI over the past 30 years it has never ceased to amaze me the diversity of activities in which I have been involved. 2016 will stand out as the year where we had to defend our status as a Non-Governmental Organisation (NGO) as the NGO community had the privilege of nominating a senator. Of the 143 NGOs registered under the NGO Act only 29 could prove they are in “Good Standing” and therefore eligible to vote for a representative. We were proud to have nominated Mr Donovan Reneau our Vice President, as a senator, who although not successful in his bid represented us well by highlighting the ability of a person who is blind to lead a fulfilling and independent life.

Although more than 29 NGOs may be operating, this is many fewer than 30 years ago when it was a vibrant, dynamic NGO community committed to improving the lives of Belizeans. This can be attributed partly to the difficulty in operating in a country with a small population where donors are few. The lack of

international support for the region and the shift in emphasis from the traditional charitable causes to environmental preservation has also had an impact on the ability of NGOs to survive. The reduction of active NGOs is certainly not due to all people having their rights protected and their needs met but perhaps more to the difficulty in operating in a situation where administrative requirements are increasing and competent staff are needed to keep up with the paperwork. 30 years ago it would have been inconceivable that an NGO would have to charge its patients a tax on a pair of glasses that is produced and sold at low cost.

This situation makes us even more grateful to all our volunteers, staff and supporters who have made it possible not only to keep our doors open, but to grow and develop into an organisation that is valued and respected for the service it provides.

J.M. Musa

Joan Musa | Executive President

A MESSAGE FROM THE EXECUTIVE DIRECTOR



As our country heads further into an economic downturn, we see an increase in the demand for more affordable quality eye care and thereby a surge in the numbers of people accessing our services. In 2016, we received more than 12,000 patient visits in our primary clinics located throughout the country. Our secondary eye care team received almost 5,000 visits from patients requiring specialist care. The increase in demand for eye care services highlights the need for additional support.

The World Health Organization (WHO) estimates 30 Optometrists and 10 Ophthalmologists are needed to serve the population of Belize. We are fortunate to have three local optometrists currently with BCVI and one clinical ophthalmologist; however, we are nowhere near the WHO standards. Scholarships are needed in order to train qualified Belizeans in Optometry and Ophthalmology. In the short term, we rely on optometrists through visiting groups, the Cuban Mission and volunteer surgical Ophthalmologists from the US and Europe.

In 2016, with support from the Ministry of Health (MOH) and the Pan American Health Organization (PAHO), we finalized the National Eye Health Strategic Framework (NEHSF) 2015 – 2020. A national consultation with key partners and stakeholders resulted in the identification of four major areas of need: strengthening of human resources, increased financial support, increase of strategies to ensure referrals of eye health problems and a strengthened integration of eye health data. As we move into 2017, we will stress these issues with the MOH as we prepare to re-evaluate and sign our Memorandum of Understanding (MOU) for the next 10 years.

Thanks to visionary leadership, dedicated team members and continued support nationally and internationally, BCVI has just celebrated 35 strong years of service. We look forward to our continued partnerships and to the future development of BCVI as we work toward the reduction of avoidable blindness and to help those who are blind live independently.

CA Musa

Carla Ayres Musa | Executive Director

INTRODUCTION

Non-profit organization, The Belize Council for the Visually Impaired (BCVI) was founded in 1981 and initially provided primarily Rehabilitation services to those who were blind or visually impaired. BCVI has more than 35 years of experience serving the people of Belize. We currently operate with a staff of 34 at a budget of approximately US\$600,000 annually. The gradual increase in the range of services offered demonstrates BCVI's success in reaching out to the community on both a local and national level.

Over the years BCVI has expanded its services to include prevention and treatment of blindness for the five leading causes in Belize: Cataract, Glaucoma, Diabetic Retinopathy, Childhood Blindness and Refractive Error. Early identification of an eye problem is essential for a successful outcome that will result in a full, productive and independent life. Whether it is to provide treatment, a pair of glasses or for those who are blind, provide early stimulation, the earlier the problem is identified, the greater the benefit for an improved life.

The entry point to our services and first level of care is through the five Primary Eye Care Clinics strategically located around the country. Here an optometrist performs a thorough eye examination including refraction to check if the vision will improve with glasses. Assisted by an ophthalmic assistant, the patient can select from a variety of frames, many at below cost prices. Our aim is to ensure that all those needing glasses receive them at a cost they can easily afford. The glasses are made up individually at BCVI's optical lab located in Belize City and are sent back to the appropriate clinic thereby reducing expense and inconvenience to patients.

People needing further attention are referred for an examination at the Secondary Eye Clinic situated in the Lion's Building in Belize City which serves the entire country. We continue to target the three leading causes of blindness in Belize and with the help of the dedicated staff and volunteers we are reducing the loss of vision due to cataracts, glaucoma and diabetic retinopathy.

BCVI's rehabilitation services focus on improving the lives of anyone who is blind or has a significant loss of vision. The services provided are sensitive to the specific needs of each child, man and woman at their present stage of life. BCVI is the only organization of its kind in Belize, providing primary, secondary and tertiary level eye care as well as educational and rehabilitative support to children and adults who are blind or visually impaired.

We know that the people who most require our services live in isolated villages and cannot afford to travel to the doctor, much less pay high prices for private services. Through this report we invite you to see how BCVI is able to make a difference in the lives of people who have an eye problem.



- BANKERS**
Belize Bank Ltd.
 Albert & Regent Streets
 Belize City
- ACCOUNTANTS**
Felix Reyes
 Chartered Accountant
 5760 Meighan Avenue
 Belize City
- HEADQUARTERS**
National Eye Clinic/Lions' Building
 Princess Margaret Drive
 Belize City
- BCVI FOUNDATION**
Thomas J. Angell
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 150 North Michigan Avenue, Suite 1000
 Chicago, IL 60601 Illinois 60603-6145 USA

BCVI is a Company Limited by Guarantee and is Registered as a Non-Government Organization Certificate No. 12/02
The BCVI Foundation is a 501(c) 3 not-for-profit organization in the USA. US donations can be sent to the BCVI Foundation address above.

STAFF AND BOARD MEMBERS



EXECUTIVE BOARD
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Honorary President

EXECUTIVE PRESIDENT

Joan Musa

DONOVAN RENEAU

Vice President

MILAGRO GAREL

Secretary

DOLORES BALDERAMOS GARCIA

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SHEENA CASTILLO

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KAMELA PALMA

Executive Member

GINA FONSECA

Executive Member

BOARD MEMBERS

SHARON POLLACK

JOSEPH GAREL

JOSE ENCALADA

LEONIDES CUELLAR

ADMINISTRATION

Carla Ayres Musa - Executive Director

Leolyn Garcia - Programme Director

Mark Mitchell - Diabetic Retinopathy Programme
Manager & IT Officer

Carmencita Cruz - Finance Officer

Andrea Haylock - Administrative Officer

Clifton Borland - Equipment Maintenance Officer

Elihugh Pitts - Driver/Messenger

Kenton Blanco - Driver/Messenger

PRIMARY EYE CARE

Jackie Graham Hemsley - Primary Eye Care Manager

Rita Witzil - Optometrist, Orange Walk & Corozal

Elvia Bonilla - Optometrist, Belize City

Omar Ceballos - Optometrist, (part-time)

Arisel Mosqueda - Optometrist, South

Oscar Hoare - Ophthalmic Assistant, Belize City

Peggy Ann Gongora - Ophthalmic Assistant, Belize City

Elia Slusher - Ophthalmic Assistant, Orange Walk

Thomas Nunez - Ophthalmic Assistant, Stann Creek

Brittney Sheppard - Ophthalmic Assistant, Cayo

Randolph Williams - Ophthalmic Assistant/Camera
Operator, Toledo

STAFF AND BOARD MEMBERS



DIABETIC RETINOPATHY
SCREENING

Magali Sabido

Camera Operator, Orange Walk

Anna Salam

Camera Operator, Stann Creek

Lysette Pren

Camera Operator, Belize City

SECONDARY EYE CARE

Dr. Baxter McLendon

Ophthalmologist (part time)

Dr. Zoraida Perez Diaz

Medical Ophthalmologist (full time)

Caroline Usher

Staff Nurse

Joshuaun Stanford

Practical Nurse

Stacy Cadle

Practical Nurse

Sagri Rodriguez

Administrative Officer

EYE GLASS PRODUCTION
LABORATORY

Shakeel Flowers

Optical Technician

Alwayne Cherrington

Optical Technician

Rudy Cocum

Optical Technician

Francois Chocolaad

Optical Technicial

Samira Escalante

Lab Administrative Officer

REHABILITATION

Liza Williams Zelaya

Senior Rehabilitation Officer,
Belize & Northern Districts

Elvia Sierra

Rehabilitation Officer, Cayo & Southern Districts

Victor Chan

Rehabilitation Programme Assistant

Norma Rios

Rehabilitation Programme Assistant

Sagrario Clarke

Itinerant Teacher, Northern Districts

PROGRAMME DEVELOPMENT & HIGHLIGHTS OF 2016

The sustainability of the organization is always to be taken into consideration as we continue to develop. We are relying less on grants from external resources and these are limited to special projects. Presently the Queen Elizabeth Diamond Jubilee Trust is assisting with a project for the screening and treatment of Diabetic Retinopathy. Also contributing to this important project is the World Sight Foundation who have provided training opportunities. Our main income comes from our fees for services and sale of glasses. We also get a small regular grant from the Ministry of Health and payments for services provided to the National Health Insurance. All of these income sources add to our ability to not only continue our services but to grow and develop.

BCVI is fortunate for the foresight of Thomas Angell and Dr. Paul Anthony who set up the BCVI Foundation in the USA over 20 years ago. They have been voluntarily administering this foundation and BCVI has seen an increase in the use of the Foundation and the usefulness of it in our international fund raising. We are very grateful for their work and in March 2016 appreciated a visit of Dr. Anthony, Treasurer of the Foundation, when we discussed the potential growth of the Foundation in the future.

Thanks to support from the Ministry of Health and the Cuban Brigade we welcomed Optometrist Arisel Mosqueda to our Punta Gorda Clinic in February for a two-year period. Arisel is also providing coverage in Dangriga. The Ministry of Health continues to provide two nurses at our Secondary Eye Care Clinic. Nurse Caroline Usher continues to be an invaluable support in keeping the clinic and operating theatre running smoothly and efficiently with the assistance of a practical nurse, on rotation.

We are grateful for the continued cooperation with the Ministry of Health and hope to see a further increase in national attention to eye health as CEO in the Ministry of Health, Dr. Ramon Figueroa has officially endorsed the National Eye Health Strategic Framework. This document was finalized in April, after a visit from the Regional Representative of PAHO Dr. Juan Carlos Silva led a National Consultation for Belize's National Eye Health Strategic Framework. Organized by the Ministry of Health with support from BCVI and PAHO, participants included partners and stakeholders in the provision of eye care across the country. The Framework stresses the need for increased support in eye health services from the Ministry with a focus on increased human and financial resources. It stresses the importance of data collection and monitoring and evaluation which BCVI does through the Belize Health Information System (BHIS).



Alwayne generating a pair of glasses at BCVI Lab.

BCVI's Optical Lab is essential in providing an invaluable service for our patients to get the best vision possible. It is also a primary source of income and is what has helped keep our organization sustainable over the years. Unfortunately, over the past two years we have had many staff changes and in 2016 we were saddened by the tragic loss of BCVI's

PROGRAMME DEVELOPMENT & HIGHLIGHTS OF 2016

Optical Technician Alwayne Cherrington. We have updated the procedures and former Lab Technician Shakeel Flowers has taken on the role of Lab Administrative Officer with training from our IT Officer, Mark Mitchell, Admin Officer Andrea Haylock to establish an efficient support system for producing glasses including an accurate inventory system. To replace Alwayne and Shakeel we hired Rudy Cocum, an experienced Lab Technician who is training a second technician Francois Chocolaad along with guidance from our former Lab Technician, Clifton Borland who is now our Equipment Maintenance Officer.

Since returning from her studies towards a Masters Degree in Public Health in the UK, Programme Director/Optometrist Lyn Garcia has concentrated on improving the Primary Eye Care System. With Lyn's training input with the OAs and Optometrists, training and guidance with the Lab Technicians, and reinforcing a patient-centered approach and open communication lines, we hope to see an improvement in the quality of glasses being produced. She will in the future be looking at the referral system for our entire service delivery to ensure that patients receive all the benefits of our care.

Training in referral was started by Dr. Elspeth Green a volunteer ophthalmologist from the UK who visited for three months during which she provided training in triaging and referrals for the Belize City Optometrist and Ophthalmic Assistants across the country. Dr. Green's time spent evaluating the system has improved the referrals from Primary Eye Care to Secondary Eye Care. Dr. Green also assisted in the screening of the babies in the NICU at the KHHM for which she has also created a

Protocol to be shared with the Ministry of Health.

The Rehabilitation and Education Programme has been strained over the past few years with only two Regional Field Officers (RFOs) providing services to people who are blind or visually impaired. To assist with the large number of students in the North, we hired Mrs. Sagrario Clarke as a part-time Itinerant Teacher to support students in Orange Walk and Corozal. We are grateful to our Rehabilitation Team and the Book Production Unit that have kept up with the scanning and editing of school books and assignments for our Inclusive Education Programme.



Rowan and The Image Factory Foundation Team

BCVI was honoured to be a part of the launch of the children's book *Climb Walk Dive: Adventures of Rowan Garel*, which chronicles his journeys to raise funds for BCVI. Yasser Musa of the Image Factory Art Foundation led the project with writers Katie Usher and Gia Martinez and Illustrator Marvin Vernon. The book was unveiled to a packed room of family, friends and fans as Rowan spoke about his amazing experiences. Students from St Mary's School read portions of the book for the audience. This was Rowan's last activity with

PROGRAMME DEVELOPMENT & HIGHLIGHTS OF 2016

BCVI before he left for University in the USA in early June. We could not be more happy for and proud of Rowan. The printing of the first edition of the book was sponsored by SAGE a UK publishing company as part of their cooperate responsibility.

Much time has been spent on our Diabetic Retinopathy Programme and in June, we were happy to welcome Dr. Astrid Bonfield, CEO of The Queen Elizabeth Diamond Jubilee Trust who visited BCVI to tour the National Diabetic Retinopathy Programme being funded by The Trust. Later that month, Rita Witzil attended a training session led by Sightsavers on the use of the Quality Standards Assessment Tool. The QSAT is to be used in the assessment of the National Diabetic Retinopathy Programme. The session was held in Dominica in June in order to prepare the countries being funded by The Queen Elizabeth Diamond Jubilee Trust. Rita has since assessed the Belize programme which is successfully meeting its objectives.



Ministry of Health and BCVI and CEO of The Trust, Dr Astrid Bonfield

As part of the Queen Elizabeth Diamond Jubilee Trust Project, we held two Management Advisory Committee (MAC) Meetings. The group is comprised of representatives from the Ministry of Health, BCVI, Belize Lions

Club, Belize Diabetes Association, Nurses and Midwives Council, the Government's Health Education and Community Participation Bureau (HECOPAB), The Pan American Health Organization (PAHO) and the National Health Insurance (NHI). The purpose of the MAC is to provide guidance and insight for the national Diabetic Screening and Treatment Programme. BCVI also attended the Virtual Meeting of the Regional Coordinating Committee (RCC) with members of other countries involved in the Trust's regional programme.

With support from Anthony Chignell and World Sight Foundation, BCVI's Ophthalmologist Dr. Zoraida Diaz visited the UK for Programme Development in the area of Diabetic Retinopathy. Dr. Diaz was hosted by Dr. Teresa Sandinha and Dr. Michael Eckstein in their respective eye hospitals. The visit was extremely helpful for Dr. Diaz who is the head of the National Eye Clinic in Belize City.

In September, The Lions Club of Belize and the Lions Club International Foundation invited BCVI's Executive Director Carla Ayres Musa to represent the country in Geneva, Switzerland at the World Health Organization's (WHO) Diabetic Retinopathy (DR) Conference. Alongside other organizations and groups working to reduce avoidable blindness due to DR, Mrs. Ayres-Musa presented on Belize's National Diabetic Retinopathy Programme and its successes and challenges.

In November, Diabetic Retinopathy Programme Manager Mark Mitchell along with Ministry of Health's designated focal person for DR, Donovan Cacho, attended the Regional Committee Meeting for the Queen Elizabeth Diamond Jubilee Trust in Jamaica. The meeting brought

PROGRAMME DEVELOPMENT & HIGHLIGHTS OF 2016



Caribbean DR Programme Meeting

all countries in the region receiving support from the Trust for the Regional DR Programme together. Reports were given on each country's successes, challenges and future plans. Belize's programme is leading the way with regards to patient numbers and programme development and with the planned Public Education Campaign in 2017 we hope to increase the numbers of patients benefiting from this service.

- Networking continued through other in-country meetings and conferences:
- Programme Director Lyn Garcia presented at the Ministry of Health Zika Conference to inform physicians of the services available at BCVI.
- Executive Director, Carla Ayres Musa, attended a meeting with Regional PAHO Representative on Disabilities to discuss the needs within the Rehabilitation Programme. She also attended three-day workshop conducted by PAHO and the Ministry of Health during which several priority areas were identified in the hopes of increasing support from PAHO as part of their country cooperation agreement. BCVI was included in the discussions and pointed to the need for increased funding, roll out of NHI and implementation of plans and procedures at the government level.
- BCVI partnered with the Belize Diabetes

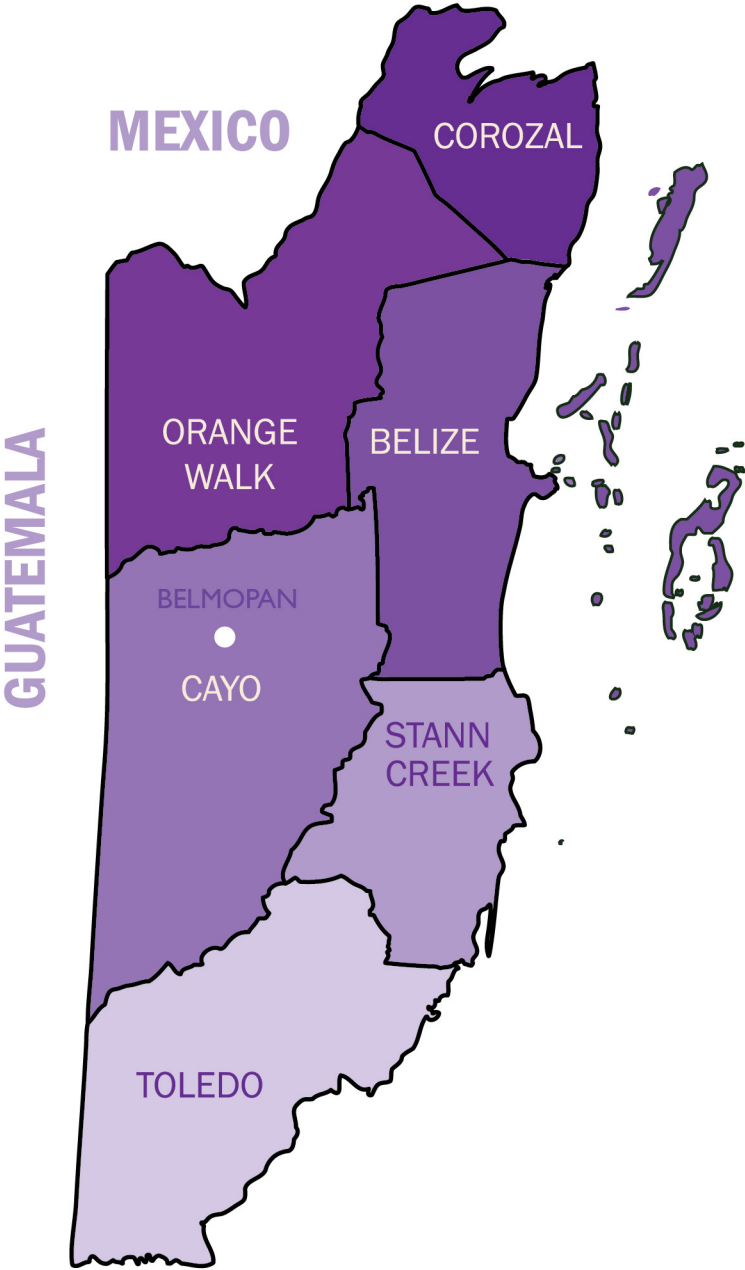
Association in November to highlight the importance of Eye Health for people living with Diabetes. DR Screener Lysette Pren and Carla Ayres Musa took part in Diabetes Awareness Walks in Belize City and Belmopan. The theme was Eyes on Diabetes and the walks were registered with Global Diabetes Foundation.

- World Health Day focused on Diabetes and BCVI was happy to take part in PAHO's forum during which client Javier Roberts spoke about being diagnosed with blindness due to Diabetic Retinopathy. His story is an inspiration and lesson for others to get their eyes tested annually and follow up with treatment if necessary.
- We were happy to welcome Orange Walk Mayor Kevin Bernard who toured the DR Programme in Orange Walk along with the local media to endorse the programme and encourage all citizens to access the service.

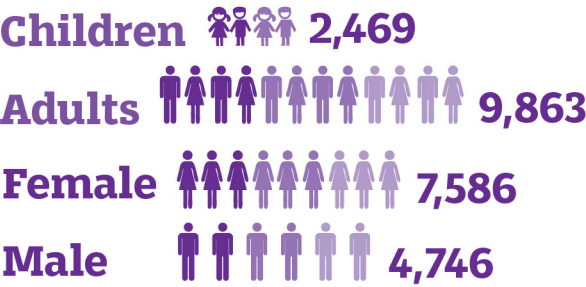


Mayor Kevin Bernard visits BCVI's DR Programme in Orange Walk

PRIMARY EYE CARE 2016



Of the total 12,332 examined:



ORANGE WALK - COROZAL AND SAN PEDRO

Clinics	229
People Examined	3285
Prescription Glasses	903
Total Population	98,774

BELIZE

Clinics	236
People Examined	4857
Prescription Glasses	2051
Total Population	83,524

STANN CREEK

Clinics	120
People Examined	2045
Prescription Glasses	487
Total Population	34,324

TOLEDO

Clinics	80
People Examined	1379
Prescription Glasses	276
Total Population	30,785

CAYO

Clinics	136
People Examined	765
Prescription Glasses	286
Total Population	75,046

BCVI’s Primary Eye Care Programme is the first entry point for all our services. We operate five Primary Eye Care Clinics strategically located around the country. At each, an optometrist performs a complete eye examination which is completely free of charge. This examination includes a refraction test to check if the vision will improve with glasses. Assisted by an ophthalmic assistant the patient can select from a variety of frames to suit their budget. The prescription lenses are made up at our optical lab and dispensed back to the patient at their local clinic.

In 2016 a total of 810 clinics were conducted and 12,332 people had eye examinations at our five Primary Eye Clinics.

Of the total 12,332 examined:
Children – 2,469 Adults – 9,863
Female – 7,486 Male – 4,746

A total of 4,003 prescription glasses were produced and an additional 438 reading glasses were dispensed. 1,082 people were referred to a BCVI ophthalmologist by our optometrists for further evaluation and treatment. This examination could take place when an ophthalmologist visits their local clinic or at our main referral facility in Belize City. Working with our PEC clinic staff, three groups of visiting volunteer optometrists examined an additional 795 people in the villages.



PRIMARY EYE CARE 2016

We continue to screen school children for vision problems. Countrywide 3077 children had their visual acuity tested and 484 were referred for refraction or further evaluation.

BCVI continues to conduct outreach clinics to provide coverage for those who are not able to access our services. We have monthly clinics in San Pedro and Corozal thanks to the Lions Club and Methodist Clinic who host our Orange Walk Team.

Once a year we are fortunate to be able to team up with Dr. Kinloch Nelson and the Grace and Holy Episcopal Church from the US, to provide eye exams at various schools in the Cayo District. This year, along with Belmopan and Dangriga Ophthalmic Assistants (OAs), Brittney Sheppard and Anna Salam, the team examined more than 100 children; 5 of which were referred to the Ophthalmologist and 59 were given prescriptions. We are extremely grateful for the additional support from the group in donating the funds needed to generate the glasses for the students.

Regular annual visitors Dr. and Mrs. Lee Peplinski of His Servants Ministries, Kentucky spent a productive week in the Stann Creek District (photo below) and examined 671 people, performed 233 refractions, provided 23 prescriptions and 365 readers and referred 90 people to an ophthalmologist.

SECONDARY EYE CARE 2016



Nurse Stacey Cadle administers drops for a patient

In Belize, BCVI continues to target the five leading causes of blindness prevalent in the Caribbean thereby reducing the loss of vision due to cataract, glaucoma, childhood blindness, refractive errors, and diabetic retinopathy. BCVI provides Secondary Eye Care with ophthalmological treatment at its main referral center, situated in the Lion’s Building in Belize City, and also at our district clinics.

We are very pleased to report that medical ophthalmologist Dr. Zoraida Perez-Diaz, having gained her Belizean nationality, has become a full-time member of staff. As a result, we have been able to attend to almost 1,000 more patients in 2016.

We are especially grateful to our regular ophthalmologist Dr. Baxter McLendon, for his continued support for long periods over the

past eight years. He has been putting out the word amongst his many colleagues and we have seen an increased interest from volunteer ophthalmologists who provide specialist care for all types of treatment on a short-term basis.

In 2016 there were a total of 4795 patient examinations by ophthalmologists at our main referral centre for Secondary Eye Care (SEC).A total of 135 cataract surgeries were performed at the SEC clinic and 267 laser treatments were conducted countrywide for retinal conditions such as Diabetic Retinopathy.

With the help of volunteers, National Health Insurance (NHI), the Government of Belize, Lions, the donation of supplies, and a small fee for services we are able to make this service sustainable.



Dra Diaz examines a patient post surgery

SECONDARY EYE CARE 2016

VISITING SPECIALIST REPORT FOR SEC 2016

Doctors	Date	No. Seen	Cataract Surgery	Other Surgery	Laser by Patient	Laser by Eye
Teresa Sandhina	18 -22/01/2016	70	0	0	20	26
Michael Banach	12-13/02/2016	38	0	0	9	9
Dan Gold/Bill Riggs	26-27/02/2016	55	33	0	0	0
Baxter McLendon	08-11/03/2016	63	4	8	3	3
Baxter McLendon	18-26/05/2016	53	16	7	0	0
Inder Singal	17/03/2016	37	0	0	15	24
Inder Singal	18/08/2016	50	0	0	28	43
Michael Eckstein	16-19/05/2016	35	0	0	12	17
David Boes	31/05-02/06	63	36	0	0	0
Courtney Kraus	06/06/2016	36	3	29	0	0
Byron Deutschmann	22/07/2016	12	0	0	3	6
Chuck Beischel	02/08/2016	8	7	0	0	0
Baxter McLendon	14/11-05/12	91	12	10	7	8
Edgar Ogaldez	02-03/12/2016	25	24	0	0	0
TOTAL		636	135	54	97	136

The table above shows the work done by the visiting specialists at the SEC. Dr. Diaz provided over 4,000 examinations and treatments in 2016.

SECONDARY EYE CARE 2016

An additional 332 patients had ophthalmological examinations at our district clinics by visiting specialists and Dr Diaz. The breakdown is given below:

Doctors	Place	Date	No. Seen	Laser by Eye	Cataract	Referred
Teresa Sandhina	Orange Walk	21/01/2016	21	6	0	16
Baxter Mclendon	Orange Walk	26/02/2016	29	2	0	15
Baxter Mclendon	Dangriga	01/03/2016	28	0	16	0
Baxter Mclendon	Dangriga	29/11/2016	20	5	0	0
Baxter Mclendon	PG	02/03/2016	1	1	0	0
Inder Singal	Orange Walk	18/03/2016	28	15	0	3
Inder Singal	Dangriga	19/03/2016	23	17	0	0
Inder Singal	Dangriga	20/08/2016	34	17	0	0
Inder Singal	PG	19/08/2016	36	4	0	2
Zoraida Diaz	Dangriga	19/05/2016	20	5	0	3
Zoraida Diaz	PG	24/08/2016	21	2	0	3
Zoraida Diaz	PG	05/09/2016	19	2	0	1
Baxter Mclendon	PG	10/11/2016	24	2	0	2
Baxter Mclendon	PG	11/11/2006	28	1	0	0
Total			332	79	16	45

CATARACT

Cataract continues to be the leading cause of blindness in Belize. Unfortunately, we have to rely on visiting cataract surgeons and our numbers were slightly down in 2016 with 135 performed. In order for more people to benefit from sight restoring surgery we will focus on increasing the numbers of visiting surgeons as well as patient uptake to increase the cataract surgical rate. Our cataract surgical assessment tool shows a consistent marked improvement for all our patients.

GLAUCOMA

Glaucoma is the leading cause of irreversible blindness in Belize, and people at high risk are encouraged to come in for an early assessment. Unfortunately, the majority of patients visit our facilities when vision has been lost and cannot be restored. In 2016 we had 1,282 patient visits for Glaucoma at the SEC. Eye drops are the usual method of treatment. The ophthalmologists and nurses stress the importance of continuous use of drops and the monitoring of intra ocular pressure and visual fields. Laser treatment has also been provided to those who need it.

SECONDARY EYE CARE 2016

CHILDHOOD BLINDNESS

We have made great progress in our efforts to reduce blindness due to Retinopathy of Prematurity (ROP). KHMH's newly-appointed Neonatologist Dr. Elsie Constanza visited BCVI in January where it was agreed that BCVI's Ophthalmologist Dr. Zoraida Perez-Diaz would visit the Neonatal Intensive Care Unit (NICU) once a week to examine premature babies meeting the at risk criteria for ROP. This system has proven very effective at diagnosing and monitoring babies with ROP, and will also allow for ease of follow-up by BCVI once the baby has been discharged. In 2016, 42 babies, at risk of ROP, were examined at the NICU and of those 3 were referred for follow up as out-patients.

Other conditions such as cataract, strabismus and ptosis were treated by Dr Courtney Kraus and the World Paediatric Project Team who

examined a total of 85 children and conducted 32 surgeries.

DIABETIC RETINOPATHY

Blindness due to Diabetic Retinopathy is the third leading cause of blindness in the country. However, with the increase in numbers of people with undiagnosed and uncontrolled diabetes, we are seeing more people at a younger age who are losing their vision.

In response to this, at the start of 2014 we put into action our "National Diabetic Retinopathy Screening & Treatment Project" which was partially funded by the Lions Club International Foundation's (LCIF) Sight First Program through a partnership with the Belize City Lions Club. This project has been completed and further developed with support from The Queen Elizabeth Diamond Jubilee Trust.

Retinologist Dr. Mike Eckstein visited from the UK to provide further training for Dr. Zory Perez Diaz in the provision of laser treatment. Dr. Diaz is now able to provide laser treatment for diabetic retinopathy as well as Yag laser for cataract patients. Dr. Eckstein also visited the babies in the NICU at the KHMH alongside Dr Diaz to offer additional training and advice.



DR SCREENER LYSETTE PREN RECEIVES OCT TRAINING FROM DR MIKE ECKSTEIN

SECONDARY EYE CARE 2016



DR SANDINHA WORKS ALONGSIDE DR DIAZ TREATING RETINAL PATIENTS

main screening center to provide additional support when needed.

2016 was the second full year of our National DR Screening Programme and a total of 1,857 were screened countrywide with the cameras and through dilated examinations conducted by our optometrists. Of these, 1,065 had minimal changes or normal retinal images and will continue to have annual checks to ensure retinopathy does not develop. Patients with significant retinal changes receive laser treatment as early as possible to maintain maximum sight. From the total screened 131 were referred to an Ophthalmologist or Retinologist. For the year, 267 laser treatments were performed, some of which were provided at our district clinics using our portable laser which enables patients to be treated nearer to their homes.

Through BCVI's partnership with the World Sight Foundation, we welcomed Dr. Teresa Sandinha, Retinal Specialist from the UK in January. Dr. Sandinha provided continued training for BCVI Ophthalmologist Dr. Zoraida Perez Diaz in the use of our Optical Coherence Tomography (OCT) Machine as well as training in the provision of laser treatments. BCVI's Diabetic Retinopathy Programme Staff gathered in Belize City for training in grading images taken with the fundus cameras at BCVI's clinics throughout the country.

This project has been developing and strengthening and our 4 screeners are now competent in the use of the camera and are learning to grade images with training from Dr. Baxter McLendon, Dr. Diaz and BCVI's Optometrists. IT Officer and DR Programme Manager Mark Mitchell continues to visit each



VISITORS AND VOLUNTEERS

Dr. Teresa Sandinha - Retinologist from the UK visited BCVI in January to conduct training in laser treatment with Dra Diaz. Dr. Sandinha also provided training in the use of the OCT machine as well as training in grading for camera operators.

Adrian Tatarakis – President of **Help the World See** - a long-time partner of BCVI visited from January 24th-26th, and provided training for the staff at BCVI's Glasses Production Unit. Adrian visited once again in November to provide further training and assessment of the setup and administration of the Lab.

VSOP EyeNetra - representative Nikki Thomas and Optometrist Mathew Alpert did pilot clinics in Orange Walk and Belmopan to test the EyeNetra device. Patients visiting the clinic and some staff were tested on the device.

John Weymouth CEO of MEDISURG. USA and Medical equipment expert - visited Feb 6 -10 and did an extensive training with Clifton Borland maintenance and repairs of our medical, surgical equipment, at the Belize City and district clinics.

Dr. Michael Banach, Retinologist - visited from February 12th -13th at the SEC in Belize City to examine patients and provide laser treatment.

Jennifer Coy, a low vision therapist from Lighthouse for the Blind in Missouri, USA visited our Rehabilitation and Education Programme from February 22nd –23rd - to provide advice and assessments for students with low vision. Jennifer also donated low vision devices for some of our clients.

Dr. Dan Gold and Dr. Bill Riggs, Ophthalmologists - visited from February 25th -28th and did surgeries on patients that were referred from our PEC and district clinics.

Dr. Baxter McLendon returned from February 29th - March 2nd to see patients at our Secondary Eye Clinic as well as patients needing ophthalmological visits at BCVI's clinics throughout the country. Dr. McLendon examined many patients and provided cataract surgery and laser treatment. He also worked with us for the entire month of November.



DR DAN GOLD OPERATES ON PATIENTS AT BCVI'S NATIONAL EYE CLINIC

VISITORS AND VOLUNTEERS



Dr Mike Eckstein, Dr Baxter McLendon and Dr Elspeth Green discuss strategies for improving eye care in Belize

Dr. Edgar Ogaldez, Cataract surgeon - visited BCVI from Visualiza in Guatemala. Dr. Ogaldez works at the Peten Clinic and was able to volunteer his time for two days during which he examined 50 patients and performed 24 cataract surgeries. We look forward to the continued partnership with Visualiza and Dr. Ogaldez. Dr. McLendon was instrumental in bringing Dr. Ogaldez to Belize and assisted him in his introduction to BCVI.

Dr. Kinloch Nelson - organized the collaboration between BCVI and Grace and Holy Episcopal Church. The team conducted eye clinics during which they screened over 100 students in the Cayo area.

Dr. Inder Singal, Retinologist from Kentucky, USA - returned from March 17th – 19th during which he provided retinal exams and laser treatments for patients in Belize City, Orange Walk and Dangriga. He returned in August for three days and visited Belize City, Dangriga and Punta Gorda clinics to provide exams and treatment for patients with retinal problems.

Dr. Elspeth Green an Ophthalmologist from the UK - arrived in March as a volunteer with BCVI. During her three month visit, Dr. Green provided much-needed support in the

development of protocols for Primary Eye Clinics and BCVIs referral system. Dr. Green will also assist with the production of protocols for the reduction of blindness due to Retinopathy of Prematurity (ROP).

BCVI Foundation Treasurer Dr. Paul Anthony - visited in March to bring funds collected through the Foundation in the US in support of our Eye Care and Rehabilitation Programmes.

Dr. Juan Carlos Silva, Regional Representative of PAHO - visited in April led a National Consultation for Belize's National Eye Health Strategic Framework as well as giving valuable advice on BCVI's development.

Dr. Astrid Bonfield, CEO of The Queen Elizabeth Diamond Jubilee Trust - made a visit to BCVI to tour the National Diabetic Retinopathy Programme being funded by The Trust. She was very pleased with the progress and accomplishments of the programme.

Dr. Michael Eckstein - Retinologist from the UK visited in May to provide further training for Dr. Zory Perez Diaz in the provision of laser treatment. Dr. Green is now able to provide laser treatment for diabetic retinopathy as well as

Yag laser for cataract patients. Dr. Eckstein also visited the babies in the NICU at the KMHM alongside Dra to offer additional training and advice.

Dr. Lee and Mrs. Rayanne Peplinski - led a group that held screening sessions in a number of villages in the Stann Creek District. As usual their week long clinic was very productive and provided much needed prescriptions, reading glasses and referrals.

Dr Courtney Kraus and the World Pediatric Project Team - visited us once again to examine and treat children with conditions such as cataract, strabismus and ptosis. They saw a total of 85 children and conducted 32 surgeries.

Dr. David Boes, Cataract Surgeon - and his team performed 36 surgeries. We are very grateful for Dr Boes continued commitment.



Dr. David Boes and Nurse Nancy in the OR

VISITORS AND VOLUNTEERS

Dr. Chuck Beischel and Dr. Lisa Vogel from Storm Eye Institute - visited BCVI in August to provide exams and cataract surgery at the SEC. Although their trip was cut short due to Hurricane Earl, they were still able to restore the vision of seven patients with cataracts.

Dr. Nico Yee from Visualiza in Guatemala - visited with Dr. Byron Deutschmann to discuss future partnerships and perform laser treatments at SEC.

Mary Ann Studder and her colleague Rena from Defiance College - visited our offices in August to discuss potential cooperation with their student group's annual visits to outlying villages in the Orange Walk District. We were very grateful for the retinal camera that they donated and made arrangements for the shipping to Belize.



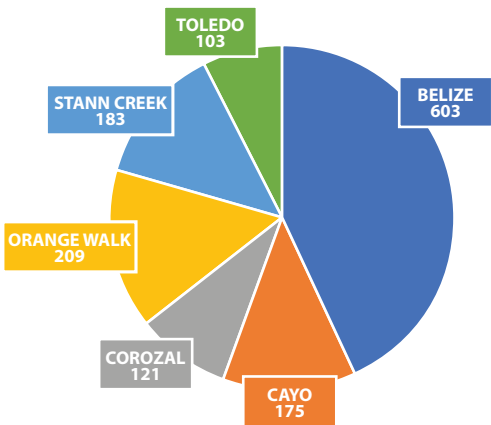
Defiance College representatives visit BCVI to donate a retinal camera.

REHABILITATION & EDUCATION

BCVI's rehabilitation services focus on improving the lives of anyone who is blind or has a significant loss of vision. The services provided are sensitive to the specific needs of each child, man and woman at their present stage of life. Although all people who are referred from the clinics are evaluated and placed on the register, not all need rehabilitation. Some may be referred to our low vision clinic or to other agencies that provide social services. Priority is always given to children as they will have many more years to live with adapting to their vision loss.

The Blind Register is the link between our eye care services and rehabilitation programmes and is essential in planning our work. At the end of 2016 there were a total of 1394 Belizeans on BCVI's Blind Register, with the majority over 55 years of age.

BLINDNESS BY DISTRICT



EARLY IDENTIFICATION AND INTERVENTION

It is essential to identify a person who is blind as early as possible, whether it is a child at birth or in early childhood or an adult who has recently lost their vision. In childhood this enables a child to receive instruction that will assist them in attaining their developmental milestones at

the appropriate time. Support from the RFO is crucial to the success of this intervention. The early introduction of rehabilitation and education services contributes greatly to a higher level of achievement.

COMMUNITY BASED REHABILITATION (CBR)

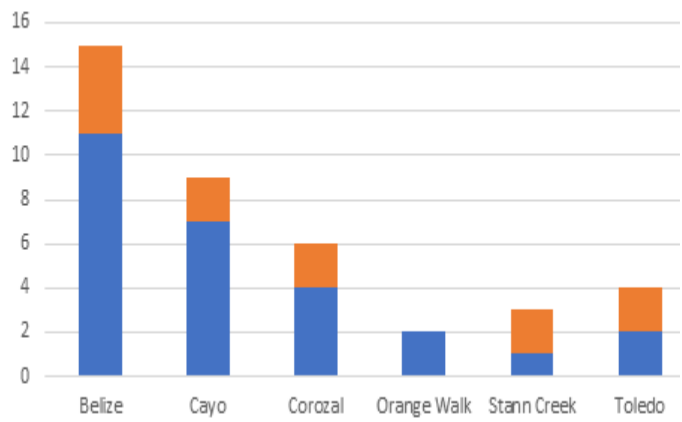
Our rehabilitation and education services are carried out at the community level using family and community members rather than bringing people to a central location. Staff and volunteers work with blind and visually impaired people in their homes using, as far as possible, the resources in the home, community and workplace. This is a holistic approach that centres around the person as an individual and training is given in the appropriate adaptive techniques.

EDUCATION PROGRAMME

In 2016 we only had two RFOs providing support to 52 children ranging in age from birth to 17, of these 39 are attending school. With a growing need for in-school support, RFOs have gone beyond their roles outside the classroom to now providing support in schools for teachers, principals and students. This is because the National Resource Center for Inclusive Education (Narcie) is not providing any support to the schoolchildren who are blind and visually impaired.

In order to be able to provide more in classroom support we hired an experienced part time teacher to assist the children in the Orange Walk and Corozal districts. This has proved very helpful as it has relieved our senior RFO, Liza Zelaya based in Belize City from also having to provide to support to children in the north.

SUMMER CAMP



All services offered in BCVI's Rehabilitation and Education Programme are free of cost to the families, this includes training, educational support, job placement, income generation, printed materials, adaptive devices and aids to help our clients live as independent as possible. We rely solely on monetary and in-kind donations as well as grants from funders to keep these services alive.

SUMMER CAMP

Our 2016 annual summer camp hosted a total of 20 students and most were accompanied by

a parent, sibling or guardian. For two weeks, the students and family members were provided lodging at Stella Maris School in Belize City. Individualized training packages were made for each child to help them reach the necessary milestones for the upcoming school year. Of the subjects being taught, emphasis was placed on computer skills, mathematics and reading.

As always, the children looked forward to the opportunities to socialize and go on field trips. We were very fortunate to have received contributions from local and international donors as well as local companies who sponsored trips for the campers and their families. Gilvano Swasey provided art and reading sessions and the children enjoyed a party with Ozzy the Clown. Sea Charters of Belize provided transportation to Goff's Caye while The Belize Zoo welcomed the children for a day with the animals – always a group favorite!

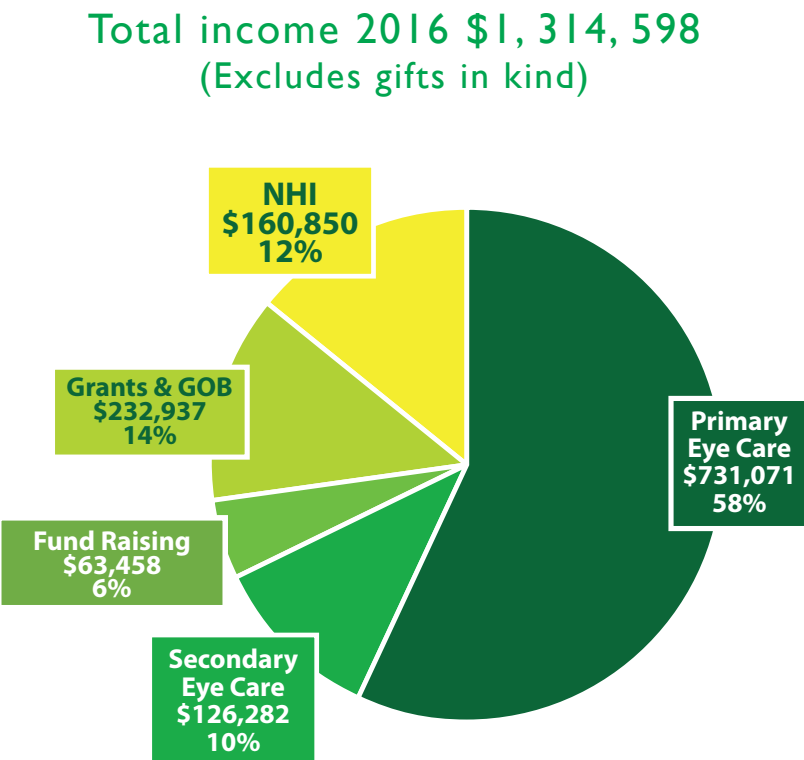


BCVI Summer Camp trip to Goff's Caye

ADMINISTRATIVE & FINANCIAL REVIEW

The chart shows the sources of income and these sources have changed significantly over the years. As grant income has continued to decrease we have had to rely more on our fees from services. While this has been satisfactory the Primary Eye Care and Glasses service has shown no growth and is \$30,000 less than 2015. This can be attributed to not being fully staffed in our clinics and not having optometrists available at all times. This especially affected the Belmopan Clinic which after experiencing many staffing problems we took the difficult decision to temporarily close the clinic until we could come up with a solution.

An area that has shown some increase in income is the Secondary Eye Care Service that increased their income by \$20,000. This is as a result of now having a fulltime ophthalmologist as we saw a higher revenue from clinic fees and laser treatments. A small research project done by a volunteer showed that people were satisfied with the services provided and were willing to pay a fair price.

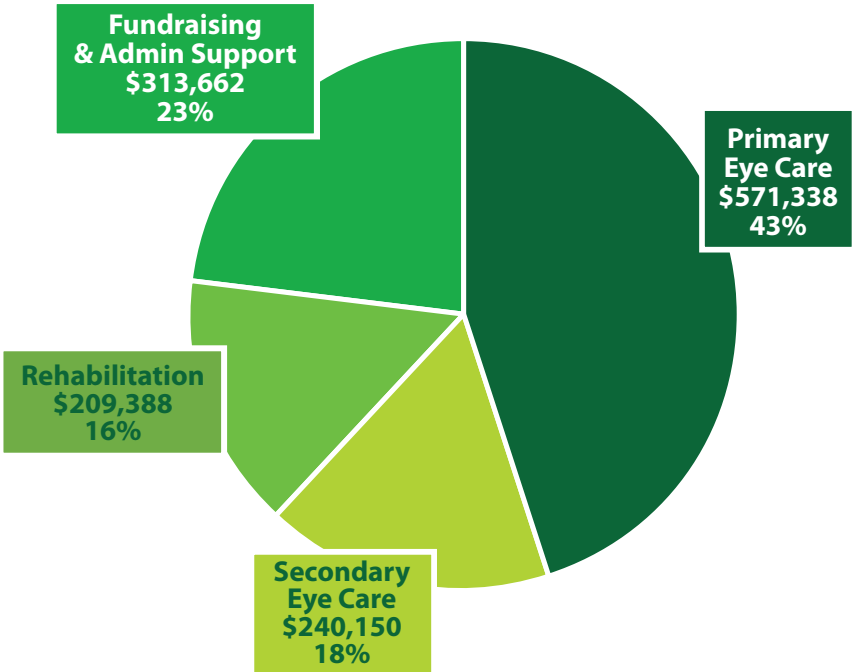


At present the only grant support we are receiving is from the Queen Elizabeth Diamond Jubilee Trust Fund that is specific to the Diabetic Screening and Treatment Programme. Government continues to give us a subvention that assists with treatment for those unable to meet the costs of surgery. The National Health Insurance (NHI) supports a number of cataract surgeries, glasses, laser treatments and diabetic examinations but unfortunately the numbers of people covered has not increased since the start of the programme in 2002.

Fundraising saw a decrease as we did not have a local event this year. However, even though funding was reduced especially locally we still had some support from regular contributors. We will increase our endeavours in this area and look at opportunities in the USA to take advantage of our BCVI Foundation.

ADMINISTRATIVE & FINANCIAL REVIEW

Total expenditure 2016 \$1,334,538
(Excludes capital costs)



The chart shows the areas of expenditure for 2016 which collectively increased by over \$40,000 since the previous year. Over 50% of our expenses go towards salaries and is the greatest single expense. This is not shown in the chart because people are assigned by department/ programme. For example, the greatest number staff (15) are needed to provide the service in the Primary Eye Programme (5 clinics and optical lab).

The costs of operating any enterprise in Belize has significantly risen over the last few years due to an increase in the cost of living. This affects NGOs by not only increasing their expenditure but also in their ability to raise funds locally.

As we continue to increase our services in eye care, our income should also increase. However, our capacity to subsidise services for people with insufficient resources is decreased. We also must mention that restrictions on foreign exchange have made it difficult to purchase supplies overseas. We are especially grateful to Help the World See for their patience with our inability to make prompt payment for the frames and lenses that are so essential to our service. They also ensure the quality and affordability of the items they supply.

Mrs Carmencita Cruz, Financial Officer, and Mr Felix Reyes, Auditor, are to be commended for their efficient and timely production of our account materials.

LOOKING TO THE FUTURE

In 2017 we intend to strengthen the administration and self-sustainability of the organisation, as well as improving the overall quality and range of services. The National Eye Health Strategic Framework, produced by the Ministry of Health (MOH), PAHO and BCVI, was finalized in 2016 and represents the way going forward to strengthen the eye care services delivered to the Belizean people. The greatest need identified in the document is for a greater number of trained personnel to be available to provide equality and access for those in need of eye care. We will work with PAHO and MOH to identify scholarships and candidates for the positions of ophthalmologists and optometrists. In the meantime, we will continue to use volunteers and also staff from the Cuban Mission to provide care.

With the return of Leolyn Garcia, our Programme Director/Senior Optometrist from her studies in the UK an aggressive training programme for the optometrists and ophthalmic assistants has been instituted. Gaps in service delivery will be identified and

additional staff hired, if necessary, to ensure a good referral and support system is in place.

In 2017 we will meet with the MOH Officials to re-negotiate our Memorandum of Understanding that outlines both parties' responsibilities in respect to the country's provision of eye care as this ten year agreement ends. Whereas BCVI is willing to continue assuming the responsibility of administering the programme we should like more cooperation and partnership in attaining the objectives.

BCVI has decided to produce an action plan for the next two years to guide the organization and it will be based on the National Eye Health Strategic Framework. We have scheduled a session with Belicana Consulting and Development Limited (BCDL) with CEO Shaun Finnetty in 2017. The company will also conduct an assessment of BCVI's Primary and Secondary clinics in Belize City in the hopes of strengthening current procedures. This will also look at the income generation aspect of collecting fees for services and giving all people



Stakeholders discuss the the main concerns and needs for strengthening eye care in Belize

LOOKING TO THE FUTURE

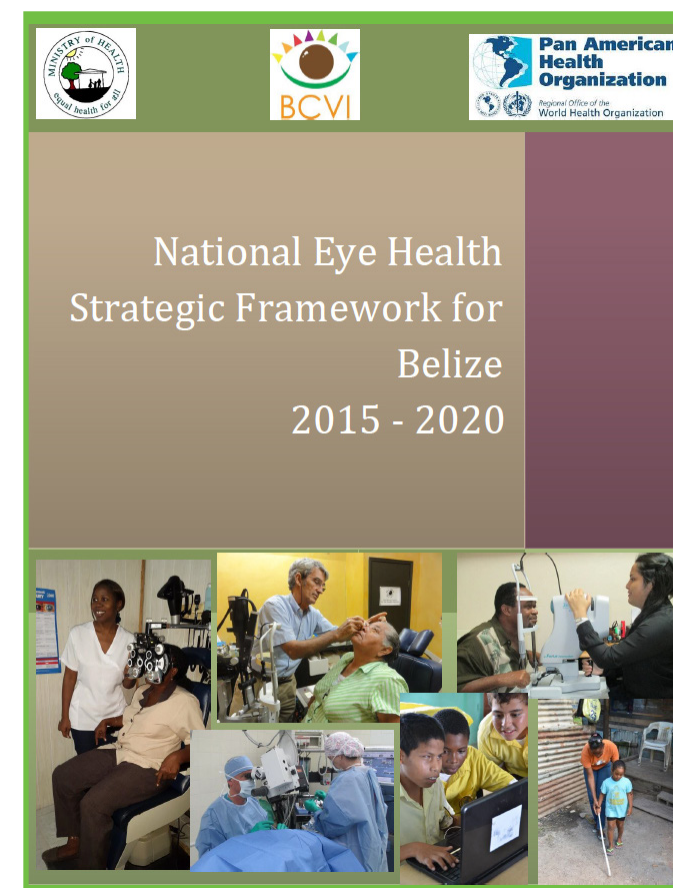
who access our services satisfaction at a price they can afford.

Our National Diabetic Retinopathy Screening and Treatment Programme continues on schedule with two years left of support from the Queen Elizabeth Diamond Jubilee Trust. Accomplishments so far include the training of Doctor Diaz in the delivery of laser training and the ongoing training of Clifton Borland in the maintenance of medical equipment. Both activities have proven to be valuable assets. Our camera operators are proficient at taking retinal images and in 2017 will take an on line course to qualify them to grade images. Going forward we will concentrate our efforts on public education and awareness of the threat of diabetes to loss of vision and blindness. We hope this will encourage all patients with diabetes to

recognise the importance and benefits of an annual check-up and take advantage of our free screening.

Great advances have been made in working with the NICU on the early identification of retinopathy of prematurity and it is now routine that Doctor Diaz examines the at risk babies on a regular basis. BCVI will work with the MOH to have the draft policy written by Dr Elspeth Green accepted and disseminated to all concerned.

We look forward in the future to strengthening the rehabilitation services as well as designing and implementing a school screening programme. This will complete a wide range of services available to all people with eye problems.



THANK YOU

BCVI acknowledges the following persons and organisations for their much appreciated and continued support.

The BCVI Foundation	Belize Water Services Ltd.
Pan American Health Organization (PAHO)	Benny’s Enterprise Ltd.
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Dr.Alyson Hall	Leroy Duek
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Ambassador Shabbaz	Caribbean Tire
Dr. Dianne Aronian	Westrac Ltd.
John Y. Jacobs O.D.	The Great House
James Brodie & Company Limited	Landy & Sons
Mr and Mrs Billy and Rose Musa	Joseph Belisle
Appliance World Ltd.	SAGE UK
Puma	Matthew Castillo
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