

A stylized graphic of a human eye, rendered in shades of orange, yellow, and black. The iris is a dark circle with a white pupil, and the surrounding area is filled with radiating lines and concentric arcs, creating a sense of depth and focus.

# NATIONAL EYE HEALTH STRATEGY (2014 – 2018) FOR ZIMBABWE





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## FOREWORD

Visual impairment and blindness affects large numbers of people from all walks of life with blindness impacting on the older persons and contributing to socio-economic developmental challenges. Approximately 80% of the visually impaired people live in the resource-constrained countries of Africa and Asia, mostly in rural areas with few underutilized eye care facilities. Prevention and control of eye disease, specifically avoidable blindness, places burden on the overwhelmed and underfunded health systems in the low-middle income countries. Avoidable blindness accounts for the highest burden of blindness and poses great challenges in prevention and control particularly in resource constrained environments such as Zimbabwe. However, there is reason for optimism, as research indicates possibilities of major strides in the prevention of avoidable blindness, treatment and correction of visual impairment. Major improvements in the prevention of avoidable blindness, diagnosis and treatment of eye diseases are being witnessed, particularly in high income and some of the developing countries. There is need to adopt available new technologies in eye health. This will, however, place substantial and diverse pressure on the already overburdened and under resourced health delivery system, and hence requires careful planning and resource mobilization.

In Zimbabwe eye conditions / diseases are currently among the top five (5) causes for hospital outpatient departments visits.<sup>1</sup> Major eye conditions include refractive errors, conjunctivitis, cataract, trauma and glaucoma. Estimates indicate that 80% of blindness is avoidable and treatable.<sup>2</sup> Major causes of avoidable blindness include cataracts, glaucoma, trauma, diabetic retinopathy and refractive errors. The World Health Organization (WHO) estimates further indicate that there are 125,000 people living with blindness, 62,500 of who are blind from cataract. WHO estimates that in Zimbabwe there is a backlog of 60,000 cataract surgery operations. This backlog is attributed to lack of cataract surgical equipment, consumables (intra ocular lenses, medicines) and inadequate qualified personnel (ophthalmologists, cataract surgeons, ophthalmic nurses, optometrists, eye health equipment technicians) in the rural provinces, coupled with the high cost of cataract surgery in the private sector. In order to clear this backlog and cater for the incidences by 2020, the country needs to conduct at least 30,000 cataract surgeries per year. The Eye Health Strategy therefore seeks to address the issue of access to quality eye care services including cataract surgery.

<sup>1</sup> NHI  
<sup>2</sup> WHO

Non-Communicable Diseases (NCDs) such as diabetes, hypertension and other infections such as HIV contribute to eye diseases and blindness. The strategy, therefore, seeks to strengthen the integration of eye disease prevention and control within the primary health care system.

To address the rising eye health disease burden, this first National Eye Health Strategy is aligned with the priorities highlighted in the National Health Strategy 2009-2015 and advocates for a comprehensive eye health control policy and programme. Avoidable blindness prevention and control requires a population-wide, integrated and cohesive approach to eye health that encompasses prevention, early detection, diagnosis, treatment, palliative and rehabilitative care. This calls for strong political, technical, and practical leadership as well as significant investment in terms of infrastructure, equipment, human resources, technologies, medicines and vaccines. Appropriate investment in Eye Health will ensure that the people of Zimbabwe are assured of their right to receive quality treatment and care regardless of who and wherever they are.

The first national Vision 2020 implementation plan (2006-2010) developed in 2005 was not disseminated, monitored or evaluated and did not address prevention and control of childhood blinding conditions. This Strategy, therefore, focuses on reform and reorganization of the way eye health services are delivered in Zimbabwe, in order to ensure that future services are consistent and associated with good clinical outcomes. It is envisaged that this will address the current inadequate funding and fragmentation of services, which is of major concern to my Ministry.

I wish to thank the National Prevention of Blindness Committee and other stakeholders for their hard work and the efforts expended in developing this strategy. Their professional dedication is an inspiration to all of us, and will help lead us forward to our goal of a healthy nation.

Dr. P. D. Parirenyatwa  
Minister for Health and Child Care

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## ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome	MTP	Medium Term Plan
ART	Anti-Retroviral Therapy	NCDs	Non-Communicable Diseases
AU	African Union	NGO	Non-Governmental Organization
CBM	Christofel Blinden Mission	NHIS	National Health Information System
CSR	Cataract Surgical Rate	NHS	National Health Survey
CVD	Cardio-Vascular Disease	NPBC	National Prevention of Blindness Committee
CfB	Council for the Blind	PPBC	Provincial Prevention of Blindness Committee
DHT	District Health Team	NTDs	Neglected Tropical Diseases
DPBC	District Prevention of Blindness Committee	OPN	Ophthalmic Nurse
EC	European Commission	PCN	Primary Care Nurse
EU	European Union	PEC	Primary Eye Care
FBO	Faith-Based Organization	PFP	Provincial Focal Person
GDP	Gross Domestic Product	PHC	Primary Health Care
GMB	Grain Marketing Board	PHT	Provincial Health Team
GMO	Government Medical Officer	PMD	Provincial Medical Director
GNI	Gross National Index	RAAB	Rapid Assessment of Avoidable Blindness
GPA	Global Political Agreement	RARE	Rapid Assessment of Refractive Error
GVT	Government	RBZ	Reserve Bank of Zimbabwe
HAZ	HelpAge Zimbabwe	RGN	Registered General Nurse
HIFC	Humanitarian Information Facilitation Center	SKH	Sekuru Kaguvi Hospital
HIV	Human Immunodeficiency Virus	SWOT	Strengths, Weaknesses, Opportunities & Threats
HMIS	Health Management Information System	TB	Tuberculosis
HR	Human Resources	TOTs	Training of Trainers
HRD	Human Resource Development	UFIC	United Family International Church
ICT	Information & Communication Technology	UZ	University of Zimbabwe
IGP	Income Generating Project	UZCHS	University of Zimbabwe College of Health Sciences
M & E	Monitoring & Evaluation	VHW	Village Health Worker
MDGs	Millennium Development Goals	WHO	World Health Organization
MIMS	Multiple Indicator Monitoring Survey	ZDF	Zimbabwe Defence Forces
MoHCC	Ministry of Health & Child Care	ZDHS	Zimbabwe Demographic & Health Survey
MoU	Memorandum of Understanding	ZOA	Zimbabwe Optometric Association

## ACKNOWLEDGEMENTS

The process of developing the Strategy began in October 2011 and was coordinated by the Ministry of Health and Child Care (MoHCC) Non-Communicable Diseases (NCDs) Unit. The Ministry of Health and Child Care is grateful to Sightsavers for financial support that facilitated the finalization of the National Eye Health Strategy. The National Eye Health Strategy is also a result of wider consultation and participation of international, regional and national stakeholders involved in the prevention and control of eye conditions and diseases. These stakeholders include HelpAge Zimbabwe, Council for the Blind, Zimbabwe Optometry Association, Provincial Medical Directorates, Zimbabwe Defence Forces, Ministry of Labour and Social Services, Sightsavers, MoHCC, University of Zimbabwe Department of Ophthalmology and the Kenya Ministry of Health. These stakeholders have shown unflagging support in the development of the National Eye Health Strategy, which will galvanize efforts in prevention and control eye diseases/conditions.

Profound gratitude is also given to the editing team that was made up of Mr. Conrad Gweru, Mr. Peter Bare, Mr. Christopher Kumora and Mr. Lee Nkala. Equally important, this strategy was a result of commitment from Ms. Clemenciana Bakasa and the unwavering support that was shown by Ophthalmologists Dr. A. Kufa and Dr. Aaron T. Magava. Mr. Elijah Marambo played a crucial role in facilitating a workshop that resulted in the ZERO draft being in place, his efforts are greatly appreciated.

## EXECUTIVE SUMMARY

In Zimbabwe eye health diseases and conditions are among the top five causes for OPD attendances and a major cause of morbidity contributing to poverty at individual, family, community and national levels. The number of people developing blindness and visual impairment in Zimbabwe is expected to increase due to lack of awareness, limited access to services, increasing prevalence of hypertension, diabetes and other infectious diseases. Prevalence of blindness is estimated at 125,000 (1% of the total population) people living with blindness. Eighty percent (80%) of these are avoidable and treatable, with cataract conditions accounting for 62,500 cases of avoidable blindness. The Ministry of Health and Child Care and its partners are prioritising the implementation of relevant evidence based interventions. This will lead to a Zimbabwe with a strengthened Eye health programme, which will result in a nation free of avoidable blindness, where the blind and visually impaired are able to develop their full potential. The people of Zimbabwe will be supported in expanding efforts for the adoption of behaviours and practices that promote and maintain healthy eyes. This first National Eye Health strategy is responding to the gaps within the national eye health service delivery system by promoting capacity building and quality in a range of eye health services which comprise prevention, early detection, diagnosis, treatment, palliative care, rehabilitation and surveillance.

The National Eye Health Strategy has five Key Result Areas (KRAs):

- a) Prevention and Control of Eye diseases and conditions
- b) Human Resources Development and Retention for Eye Health
- c) Infrastructure, Equipment, Medicine and Technologies
- d) Health Management of Information System, Research and M&E
- e) Resource Mobilization
- f) Programme Coordination

These KRAs have specific objectives addressing the gaps within the current eye health service delivery system and targeting priority eye conditions (cataract, glaucoma, refractive errors, diabetic retinopathy, trachoma, eye injuries and childhood blinding conditions). The strategy provides a high-level framework for enhancement of eye health services, and the subsequent development of implementation plans. These plans should implement the Strategy's specific objectives in ways that address

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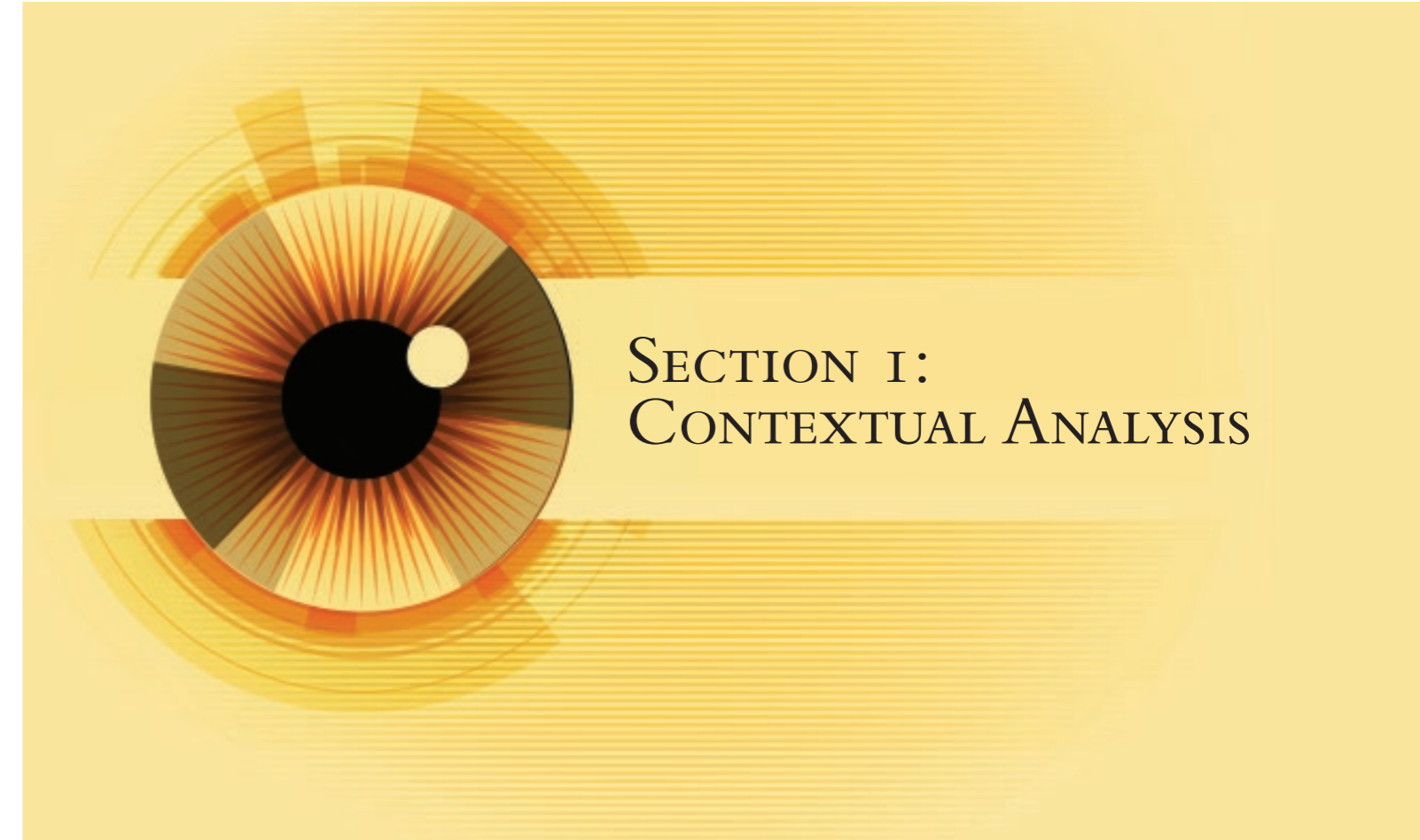
the needs of all age groups, especially children, and the older persons.

For the effective prevention and control of eye diseases and conditions the Strategy seeks to strengthen the integration of Primary Eye Care (PEC) within Primary Health Care (PHC), which calls for the reorganization of the health system. This reorganization entails training, retraining and reorientation of service providers and policy makers, provision of infrastructure, equipment, medicines and other consumables for eye health that all levels of the system and community. The absence of child eye health specialists (ophthalmologists, ophthalmic nurses among others) is of major concern to the MoHCC, which this Strategy also seeks to address. Refractive errors account for the greater proportion of visual impairment and yet within the public health sector there is no staff establishment for optometrists, the Strategy advocates for the training and creation of optometrists posts. Some of the risk factors for eye diseases include conditions such as diabetes, HIV, some STIs, nutrition deficiency and measles. This calls for integration with relevant programmes.

Evidence based information for eye health development is critical for policy guidance and programming; hence the Strategy advocates for the establishment of a national eye health database, monitoring and evaluation mechanism, and eye health research. Failure to employ evidenced based information in policy development and programming not only risks a waste of resources, but also would deny the best care for service users.

The eye health programme has been experiencing problems in the coordination of services, at national, provincial and district levels resulting in fragmented service provision. The Strategy advocates for the strengthening of the National Prevention of Blindness Committee through reviewing its terms of reference and establishing provincial and district prevention of blindness committees. The prevention and control of eye diseases/conditions requires a multisectoral approach; the composition of the organ at all levels should, therefore, reflect this.

The provision of comprehensive and coordinated eye health care services has been hampered by underfunding and not being accorded the priority it deserves. The under-resourcing of the programme has been evidenced by inadequate eye care specialists particularly in the rural areas, inadequate medicines, equipment and other consumables, resulting in an inability to access services by the majority of the people of Zimbabwe. The Strategy, therefore seeks to advocate for resource mobilisation for eye health.



## SECTION 1: CONTEXTUAL ANALYSIS

### 1.1. BURDEN OF EYE HEALTH

WHO estimates that more than 314 million people worldwide live with serious visual impairment. Of these, 37 million are blind, 124 million have low vision and a further 153 million are visually impaired due to uncorrected refractive errors. Africa, with only 10% of the world's population, accounts for 19% of the world's blindness. Globally, the major causes of blindness are cataracts, which accounts for 51% of blindness, uncorrected refractive errors (18%), glaucoma (8%), age related macular degeneration (ARMD) (4%), diabetic retinopathy (4%), pediatric eye conditions (4%), trachoma (3%), and onchocerciasis (0.7%).<sup>3</sup> Chronic eye conditions, such as diabetic retinopathy, cataract, glaucoma and ARMD affect an increasing number of people in developing countries. This is partially due to an ageing population, but also due to changes in lifestyle.

In Zimbabwe, it is estimated that 1% of the Zimbabwean population is blind (VA < 3/60) with half of these cases being attributed to causes other than cataracts. It is further estimated that some 80% of these causes of blindness are avoidable cases.<sup>4</sup> Whilst evidence exists that there is an increase in the prevalence of lifestyle related diseases inclusive of preventable blindness, not much effort is being undertaken in Zimbabwe to create awareness among communities.

<sup>3</sup>Sightsavers (2011), Losing Sight; Eye Health and Non Communicable Diseases, Sightsavers Policy Brief Nov 2011

<sup>4</sup>WHO

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According to WHO estimates, 125 000 people are blind in Zimbabwe, of which 62,500 people are blind from cataracts, 12 000 have corneal scars, 12 000 have glaucoma, 5 000 are blind from diabetes retinopathy and about 31 000 due to refractive error (VA <6/18), trachoma and HIV related conditions. Visual impairment due to cataract is 240 000 and refractive error contributes 480 000.

According to WHO, Zimbabwe has a serious backlog (60,000) of cataract surgery. The cataract surgical rate (CSR) for Zimbabwe is >569 per million population for 2012. This is far below what is recommended as a criterion for well performing eye health programme, which is CSR of 2, 500 per million population per year. Ministry of Health and Child Care records show that eye diseases are among the top five causes of Zimbabweans visiting hospitals as out-patients. However, Eye Health delivery services in Zimbabwe are hampered by a plethora of challenges which include inadequate or lack of equipment and consumables, inadequate infrastructure and inability to retain eye health specialists due to unattractive conditions of services.

## 1.2: SOCIO-ECONOMIC IMPACT OF BLINDNESS AND VISUAL IMPAIRMENT

Visual loss is both a cause and consequence of poverty and critically affects attainment of the Millennium Development Goals (MDGs) in Zimbabwe. Research undertaken in Kenya, Bangladesh and the Philippines demonstrated that, compared with their sighted neighbors, people with visual loss were poorer in terms of assets, self-rated wealth and monthly expenditure; they were less likely to take part in and spent less time on productive activities; they were more likely to report assistance from others with daily activities; and had worse health related quality of life. The economic impact is considerable: a recent analysis, which took account of direct health related costs, informal care, welfare losses and productivity losses, estimated the global cost of visual impairment and blindness to be nearly US\$3 trillion.

The majority of the blind are the older persons (4.7% of the total population – 2012 Census Report), and most of the older persons cannot afford to access eye health services. Equally important, older persons have limited or no access to eye health services.



## SECTION 2: VISION AND MISSION

### 2.1: VISION

A Nation whose people are free from avoidable blindness, where the blind and visually impaired are able to develop their full potential.

### 2.2: MISSION

To eliminate avoidable blindness through provision of comprehensive eye care services which are acceptable, accessible, affordable, and appropriate to all the citizens of Zimbabwe.

### 2.3: CORE VALUES AND PRINCIPLES

The Strategy is underpinned by the following core values and principles:

- Fairness and equity in eye health services
- Affordability, acceptability, accessibility and appropriate Eye Health Services
- Efficiency – cost effectiveness (value for money) and cost containment
- Comprehensive eye health services
- Person-centred delivery of quality services
- Evidence-based interventions and programming
- Respect of human rights
- Client and provider satisfaction
- Transparency and accountability
- Ownership and partnership



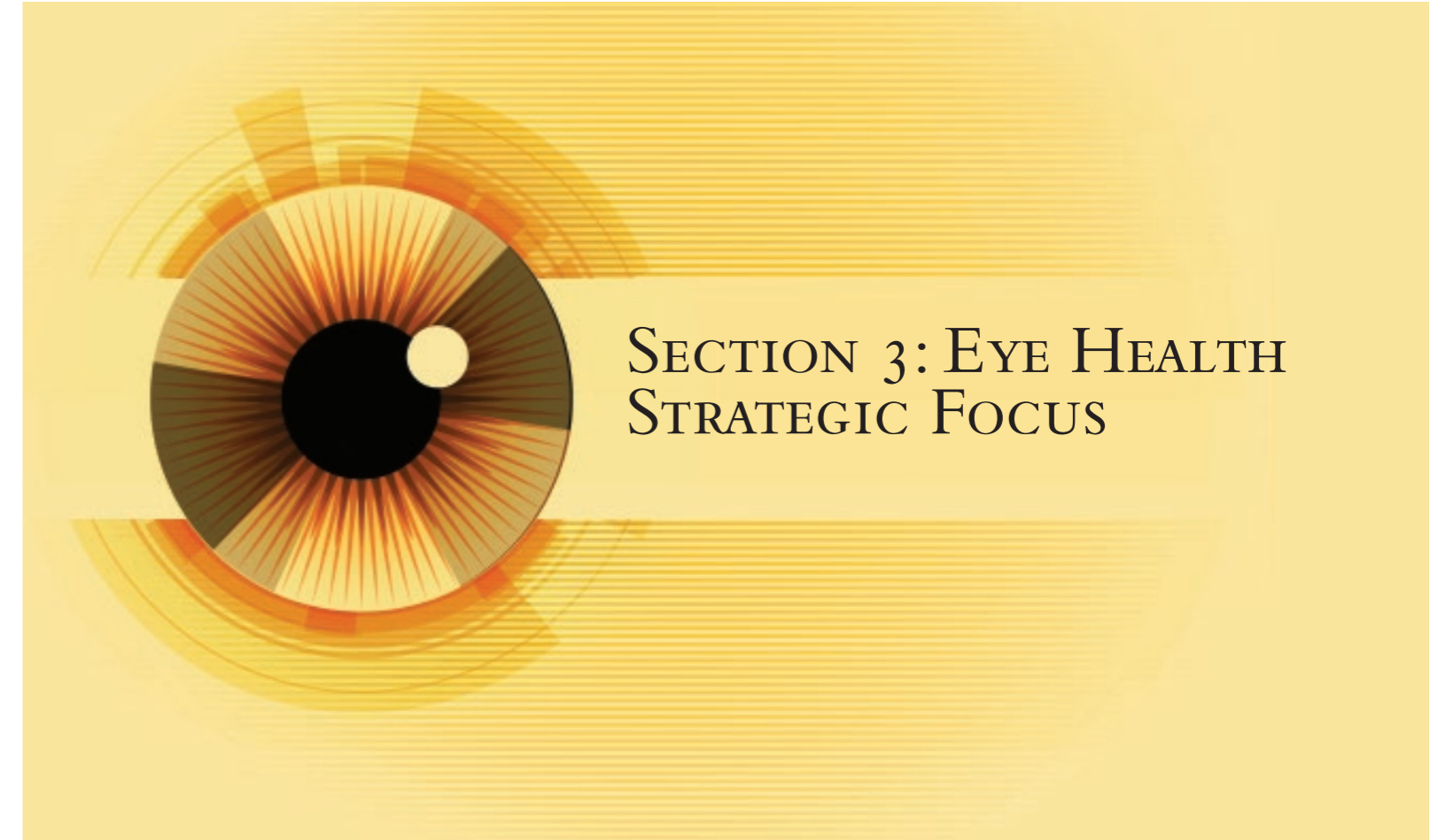
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## 2.4: STRATEGIC GOAL

To reduce avoidable blindness by 80% by 2018 through the implementation of evidence based eye health interventions.

## 2.5: STRATEGIC KEY RESULT AREAS (KRAS)

- a) Prevention and control of eye diseases and conditions
- b) Human Resources development and retention for eye health
- c) Improvement in infrastructure, equipment, medicine and technologies availability
- d) Health Management of Information Systems, Research and M&E
- e) Resource Mobilization
- f) Programme Coordination



## SECTION 3: EYE HEALTH STRATEGIC FOCUS

### 3.1: INTRODUCTION

This section sets out the future direction for eye health services in Zimbabwe, focusing on the five Key Result Areas of this Strategy. There are specific objectives for each key result area that need to be achieved in order to make significant progress in eye health over the next five years.

### 3.2: KEY RESULT AREA I: PREVENTION AND CONTROL OF EYE DISEASES AND CONDITIONS

#### 3.2.1: CHILDHOOD BLINDING EYE DISEASES AND CONDITIONS



##### CURRENT STATUS

In Zimbabwe, an estimated 8 000 children below sixteen (16) years of age have childhood blindness due to congenital cataracts and glaucoma, eye trauma, measles and retinoblastoma. Research has reported a strong correlation between prevalence of childhood blindness and under-five mortality rates. Based on an under-five mortality rate of 80-100/1000 live births, childhood blindness prevalence is estimated at 7/10,000 population

## ACHIEVEMENTS

- Opening of the Paediatric Eye Clinic at Parirenyatwa SKH 2012
- Process of integration of PEC into PHC began in 2012
- Ongoing inclusion of Ophthalmology in General Nurse, Primary Care Nurse training and Medical Doctor training curricula
- Continuous training of ophthalmologists and OPNs in the country



## LIMITATIONS

- The country at the moment has no paediatric trained ophthalmologists and OPNs, and this is further exacerbated by inadequate equipment for Paediatric eye conditions management.
- To date no research has been done to establish the actual prevalence of childhood blindness. Furthermore, there is inadequate awareness of paediatric Eye Health issues.

Specific Objectives	Strategic Activities	Output Indicators	Outcomes
To reduce the prevalence of childhood blindness from 7/10,000 to 3/10,000 by 2018	Increase collaboration with Maternal and Child Health on STI management, Immunization, Vitamin A Supplementation, Infant and Child nutrition	<ul style="list-style-type: none"> <li>• Number of early STI diagnosis and treatment in pregnant mothers and infants</li> <li>• Number of children immunized against measles and Vitamin A supplementation</li> </ul>	A reduction in childhood blindness from 7/10,000 to 3/10,000
	Strengthening of Ante Natal Care	<ul style="list-style-type: none"> <li>• Number of ANC visits per pregnancy</li> <li>• Number of pregnant women with at least four visits</li> <li>• Number of pregnant women diagnosed and treated for STIs</li> </ul>	
	Promotion of exclusive breastfeeding	<ul style="list-style-type: none"> <li>• Number of babies exclusively breastfed up to 6 months</li> </ul>	
	Strengthen tetracycline prophylaxis and management of Ophthalmia Neonatorum	<ul style="list-style-type: none"> <li>• Number of newly born that receive Prophylaxis</li> <li>• Number of Ophthalmia Neonatorum managed</li> </ul>	
	Strengthen school health programmes	<ul style="list-style-type: none"> <li>• Number of school children screened and referred annually</li> </ul>	
	Collaboration with Traditional Healers	<ul style="list-style-type: none"> <li>• Number of traditional healers trained in PEC by district</li> </ul>	
	Training of nurses in childhood eye conditions	<ul style="list-style-type: none"> <li>• Number of nurses trained in childhood eye diseases and conditions by district</li> </ul>	
Mainstreaming Eye Health Prevention and control in all developmental programmes specifically Water and Sanitation Programmes	Establish 2 Tertiary Paediatric Eye facilities at Parirenyatwa & United Bulawayo Hospitals	<ul style="list-style-type: none"> <li>• Number of tertiary paediatric Eye facilities established by 2018</li> </ul>	A reduction in childhood blindness from 7/10,000 to 3/10,000 population by 2018
	Development of Paediatric eye health management guidelines	<ul style="list-style-type: none"> <li>• Management guidelines for childhood eye conditions</li> </ul>	
To offer broad based institutional and community rehabilitation services	Establish rehabilitation programmes for low vision and blindness at all provincial eye units	<ul style="list-style-type: none"> <li>• Number of Rehabilitated blind children</li> </ul>	Optimal functioning of people with low vision and blindness
	Strengthen the referral system between MoHCC, Labour and Social Services and Education	<ul style="list-style-type: none"> <li>• Functional referral system in place</li> </ul>	

### 3.2.2: DIABETIC RETINOPATHY

#### CURRENT STATUS

According to a 2005 Zimbabwe NCDs Risk Factor surveillance, 10% (1,3million) of the people in Zimbabwe live with diabetes. However, most of the population has no access to diabetes early detection and treatment, which increases the risk for the development of diabetic retinopathy. In Zimbabwe, WHO estimates indicate that 5,000 get blind from diabetic retinopathy annually. Even for those diagnosed with Diabetes, control is a major challenge due to costs for consultation and medicines with the most affected being in the rural areas.



#### ACHIEVEMENTS

MoHCC has established 19 sites which provide routine screening for diabetes, with the exception of one province. Efforts have been expanded in training of doctors and nurses in diabetes education and management in most provinces with support from partners. In collaboration with the Zimbabwe Diabetes Association (ZDA), support groups have been established in all provinces. Plans are in place for the introduction of screening for gestational diabetes at all levels of the system within the National Reproductive Health Programme.

MoHCC, with support from partners (HTF), are procuring insulin and other oral medicines for diabetes. ZDA has mobilised equipment (Glucometers and Glucostrips) for monitoring blood sugar levels and insulin from IDF for children.

#### LIMITATIONS

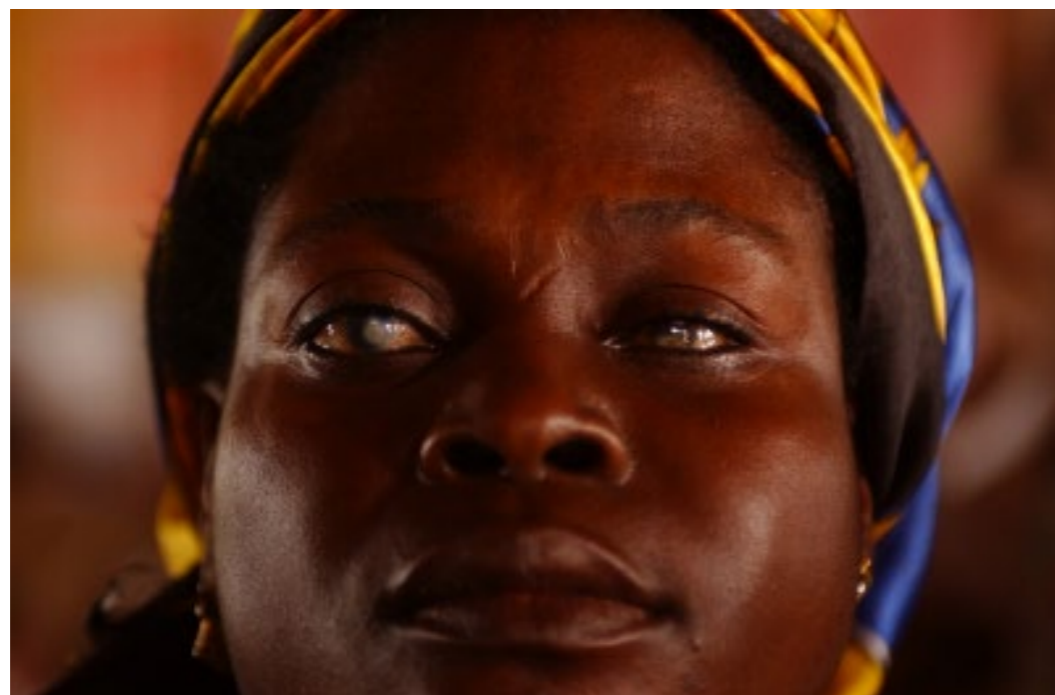
- Diabetes awareness remains a major issue that needs to be addressed
- Lack of access for regular sight assessment for people living with diabetes
- Retention of trained staff in diabetes education and management is also a challenge
- Cost of diabetes medicines makes access to services a challenge
- No research has been conducted on the prevalence on diabetic retinopathy in Zimbabwe

Specific Objectives	Strategic Activities	Output Indicators	Outcomes
To increase access to diabetic retinopathy early detection and control services by 2018	Establish diabetes early detection services at all levels of the system	# of new diabetes cases who had eye examination	Reduction in blindness due to diabetic retinopathy
	Strengthen management of diabetes at all levels.	# of diabetic retinopathy cases detected.	
	Establishment of early detection of diabetic retinopathy	# of diabetic patients screened annually	
	Integration of screening of diabetes, HIV services	# of HIV positive screened for diabetes	
	Establishment of diabetic laser treatment at Provincial and all Central hospitals	# of diabetic laser treatment centres established by 2018	
	Establish vitreo-retinal services at UBH and Parirenyatwa Central Hospitals	Vitreo retinal services centres established	

### 3.2.3: CATARACTS

#### CURRENT STATUS

According to WHO estimates, of the 125 000 (1%) people that are blind in Zimbabwe 62,500 people are blind due to cataracts. WHO estimates indicate that there is a 60,000 cataract surgery backlog due to lack of ophthalmologists in most of the rural provinces, inadequate number of OPNs, inadequate equipment and consumables and weak integration of PEC into PHC system.



#### ACHIEVEMENTS

- The two major cities (Bulawayo and Harare) have established Eye Units that provide cataract surgery services. Out of the 8 rural provinces three of them have no resident ophthalmologists. For those with resident ophthalmologists, cataract surgery services are provided.
- Partners (Council for the Blind with support from CBM, Sightsavers and other stakeholders) provide support for cataract surgery in Matabeleland North and South, Masvingo, Manicaland and Mashonaland East.
- EC supports human resource development for eye health in Midlands, Matabeleland North and Matabeleland South and provided cataract surgical equipment for Parirenyatwa Eye Unit and School of Nursing and UZ

Department of Ophthalmology in an effort to improve the quality of training.

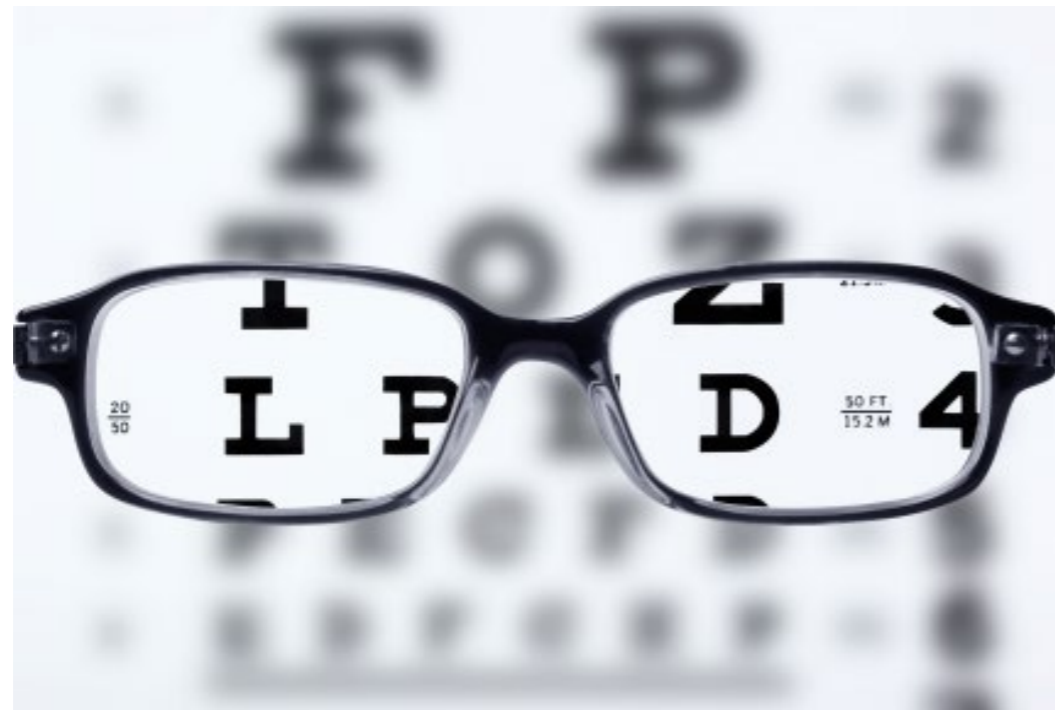
- The Cataract Surgical Rate (CSR) currently stands at 569 per million population by end of 2012.

#### LIMITATIONS

- No cataract prevalence study in Zimbabwe has been conducted; planning relies on estimates from WHO.
- Major challenges include lack of cataract surgical equipment, medicines, supplies such as intraocular lenses (IOL) and other consumables and inadequate trained eye specialists.
- Although Government policy stipulates that older persons of 65 years and above should receive free treatment (no personal cost), in most institutions these people are required to pay for services and this ranges from US\$50.00 to US\$300 per one eye in the public health sector.
- Cost to the client, out of pocket payment for cataract surgery services per eye range from US\$600 to US\$2,500 in the private sector.
- Low cataract surgical rate of 569 per million population in 2012 (compared to 2,500/1million population (WHO criteria for a well performing Eye Health Programme)
- No cataract surgical data is submitted to MOHCC from private sector resulting in under estimation of cataract surgical performance in the country. There is neither policy nor obligation that compels the private sector to submit data to MoHCC.
- NHIS does not capture data on cataract surgeries routinely, making it impossible to determine national eye health programme performance - National Health Profile

Specific Objectives	Strategic Activities	Output Indicators	Outcomes
To reduce the cataract prevalence of 60 000 by 80% by the end of 2018	Raise awareness on blindness due to cataracts	# of awareness raising campaigns	Reduction of cataract prevalence by 80% by 2018.
	Active cataract case finding	<ul style="list-style-type: none"> <li>• Number of cataracts identified by province and by district</li> <li>• # of service delivery points established</li> </ul>	
	Increasing cataract surgical service delivery points(static and outreach)in all provinces	No. of cataract surgeries performed	
	Collaboration for cataract surgery with other stakeholders	Number of partners supporting cataract surgery	

### 3.2.4: REFRACTIVE ERRORS



#### CURRENT STATUS:

Refractive Error is the major cause of visual impairment and globally it's projected to be the second cause of avoidable blindness after cataract.

Prevalence of presbyopia in > 50 year olds = 70% of 1,058,283 = 740798

Prevalence of other refractive errors in the whole population = 5% of 12,721,372 = 636,068

Total = 1,376,866 (10.82%).

#### ACHIEVEMENTS

- Council for the Blind providing corrective refractive error services at Parirenyatwa –SKH, UBH-Richard Morris, Provincial Hospitals (Gweru, Marondera, Bindura, Chinhoyi, Gwanda and Sakubva).
- Some outreach services are provided by CfB.
- School Psychological services provide screening for refractive errors and refer.
- Some private optometrists provide outreach services at nominal cost.
- Optometry School establishment at UZ CHS at an advanced stage.

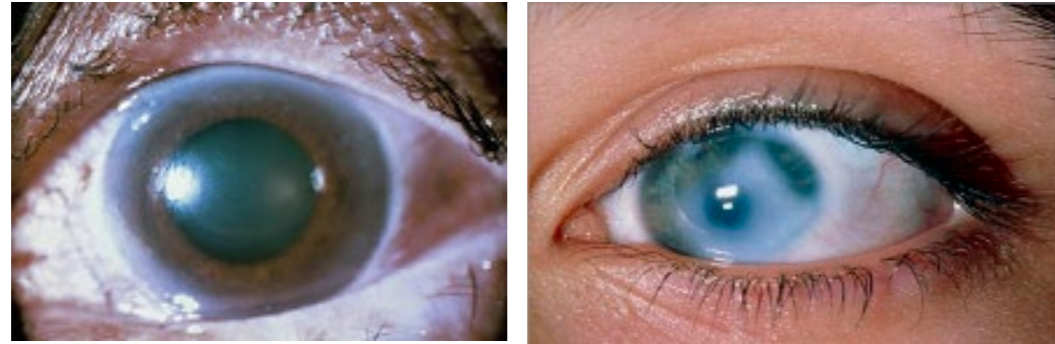


#### LIMITATIONS

- No evidence based data on prevalence of refractive errors
- OPNs not providing refractive error corrective services
- No services at district level in most provinces including urban primary facilities
- Lack of awareness within the community of refractive errors
- No optometrist posts in the public health sector

Specific Objectives	Strategic Activities	Output Indicators	Outcomes Indicators
To reduce refractive error burden from 10.82% to 7% by 2018	Expansion of refractive error corrective service delivery points (static and outreach) to provincial level	Number of Refractive error service delivery points established	Refractive error burden reduced
	Increasing the availability of low cost spectacles	Number of low cost spectacles dispensed	
	Training of OPNs in refraction -curriculum review	Number of OPNs trained in refraction	
	Training of nurses and village health workers in vision screening	Number of PCNs and VHW trained in low vision screening	
	Establishment of Mass Vision screening programmes	Number of mass vision screening campaigns conducted per province	
	Annual school children screening for refractive errors nationally	Number of school children screened per province annually	

### 3.2.4: GLAUCOMA



#### CURRENT STATUS

Glaucoma is the second major cause of avoidable blindness and is estimated to account for 12,000 cases blindness (0.1% of the population) WHO estimates.

#### ACHIEVEMENTS

- Medicines for management of glaucoma available though erratic and inadequate
- Diagnosis and treatment of glaucoma provided at institutions with specialist services

#### LIMITATIONS

- No research has been conducted to establish glaucoma prevalence in the country
- Services remain centralized; districts not serviced.
- Medicines for management of glaucoma very expensive – thus beyond access of most people
- Lack of awareness leading to late presentation at service delivery points

Specific Objectives	Strategic Activities	Output Indicators	Outcomes Indicators
To increase access to routine screening and management services for Glaucoma to 80% of the estimated 5,000 cases by 2018	Creating awareness of glaucoma risk factors among service providers and communities	Number of service providers and communities reached	Increased access to glaucoma control services to 80% of the estimated 5000 cases
	Strengthening early detection and management of glaucoma at district, provincial and central hospitals	<ul style="list-style-type: none"> <li>• Number of glaucoma cases detected</li> <li>• Number of glaucoma cases managed</li> </ul>	

### 3.2.5: EYE INJURIES

#### CURRENT STATUS

Eye injuries are among the top five eye diseases and conditions presenting in OPD in the country. Causes of eye injuries range from occupational (chemicals, thermal, electromagnetic and mechanical), recreational, road crashes to assaults. Eye injuries affect all age groups.



#### ACHIEVEMENTS

- Stakeholders such as National Social Security Authority (NSSA) are promoting occupational health and safety at workplaces. Ministry of Health and Child Care, Ministry of Transport and Communications, Traffic Safety Council of Zimbabwe and ZRP promoting road safety.
- Eye injuries awareness creation at health facilities.
- Provision of eye injuries services from central to district levels including rehabilitation services.



**LIMITATIONS**

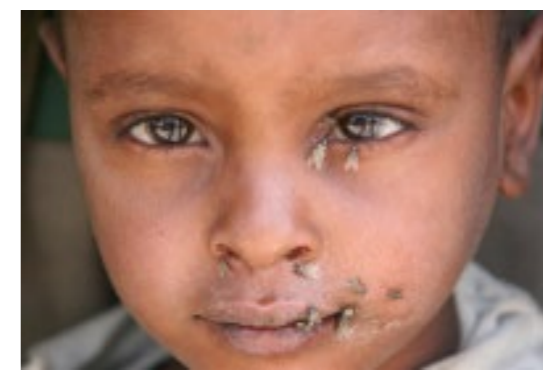
- No survey or study has been carried out on prevalence and outcomes of eye injuries National health information system does not capture data on eye injuries
- Awareness campaigns on occupational and road safety are fragmented
- Weak enforcement of legislation on occupational and road safety
- Limited awareness on eye injuries
- Inadequate availability of medicines and eye specialists to attend to eye injuries
- No regulation regarding visual function and driving

Specific Objectives	Strategic Activities	Output Indicators	Outcomes Indicators
To reduce eye injuries by 80% by 2018	Creating community and employers awareness on eye injuries	Number of communities and companies/organisations reached	Reduction of eye injuries by 80% by 2018
	Enforcement of legislation on use of protective eye wear (occupational health)	Number of companies complying with the legislation	
	Health education on eye injuries at schools.	Number of schools reached	
	Strengthen Early referral and management of Ocular trauma	Functional referral system in place	
	Advocate for legislation for visual function and driving- evidence based	Legislation in place	
	Development of treatment guidelines for ocular trauma	Management guidelines in place	

**3.2.6 TRACHOMA**

**CURRENT STATUS**

In Zimbabwe it is assumed there are pockets of trachoma. It's basically associated with unhygienic conditions including lack of water supplies and basic sanitation facilities. Trachoma affects about 21.4 million people globally, 2.2 million of whom are visually impaired.<sup>5</sup>



**ACHIEVEMENTS**

- Treatment for trachoma and its complications from district to central hospitals.
- OPNs perform Epilation and ophthalmologist performs eyelid surgeries.

**LIMITATIONS**

- No trachoma mapping has been conducted in Zimbabwe
- Limited awareness on trachoma
- Limited access on water supplies and basic sanitation

Specific Objectives	Strategic Activities	Output Indicators	Outcome Indicator
To eliminate blindness from Trachoma by 2018	Trachoma mapping	Mapping report	Trachoma free community by 2018
	Establishment of a Comprehensive Trachoma Services e.g. SAFE strategy	SAFE strategy in place	
	Mainstream trachoma prevention and control in all developmental programmes e.g. WASH cluster and other NTDs programs.	Number of developmental programs integrating trachoma prevention and control	

<sup>5</sup>WHO (27 April 2012) Weekly Epidemiological report



### 3.2.7: REHABILITATION SERVICES

#### CURRENT STATUS

Zimbabwe has a well established Rehabilitation programme from community level to tertiary level for most of the major disabilities. Unfortunately, there is little rehabilitation services for the blind and visually impaired.

#### ACHIEVEMENT

- Well established rehabilitation programme at all levels of the system

#### LIMITATIONS

- Currently there are no rehabilitation services for the blind and visually within the health delivery system

Specific Objectives	Strategic Activities	Output Indicator	Outcome Indicator
Develop rehabilitation services for the low-vision and the blind at all levels of care by 2018	Provision of blindness and low vision rehabilitation services (central, provincial, district and community)	Low vision and blind accessing rehabilitation services	Rehabilitation services established at central, provincial and community level

### 3.3: KEY RESULT AREA 2: NHIS, RESEARCH AND MONITORING & EVALUATION

#### CURRENT STATUS:

There is an established and functional NHIS in Zimbabwe. It captures data on cataract cases and other eye diseases (not disaggregated by condition). Zimbabwe has a national health research institute within the Ministry. There is a department of Policy, Planning, Monitoring and Evaluation within the Ministry.

#### ACHIEVEMENTS

- Development and introduction of:
  - national eye health data capture tool still to be introduced
  - Cataract surgical quality outcome monitoring tool
- Cataract cases, Ophthalmia Neonotorum and other eye diseases incorporated into the NHIS

#### LIMITATIONS

- Priority Eye Health Diseases not captured by the NHIS with the exception of cataracts
- No situation assessment has been conducted to provide baseline data on prevalence and burden of the avoidable blindness
- Available data is based on WHO estimates and other sources
- No management guidelines available for the various levels of the system
- Limited eye health data incorporated into NHIS and no eye health data from the private sector

Specific objective	Strategic activities	Output indicator	Outcome Indicator
To establish priority eye health conditions for surveillance by 2018	Introduction of the parallel national eye health data capture tool to all levels of the system	Number of priority eye diseases incorporated	Burden of eye health diseases established
	Incorporation of priority eye diseases into NHIS (T series)	Burden of blindness and low –vision established	
	Conducting a blindness and low vision prevalence survey	National eye health data base in place	
	Establishment of a national eye health computerised data base		
To establish a monitoring and evaluation mechanism for eye health by 2018	Development of management guidelines for all levels of care	Number of private institutions providing data on eye health	
	Introduction of cataract surgical quality outcome monitoring tool	Management guidelines in place	Monitoring and evaluation mechanism in place
	Introduction of the quality of life index monitoring tool	Number of cataract surgeries with either good or poor outcome	
To provide evidence based information for policy guidance and programming by 2015	Trachoma mapping	<ul style="list-style-type: none"> <li>Number of people with improved quality of life or economically productive</li> <li>Number of school drop outs re-enrolled</li> </ul>	
	Priority disease prevalence study through RAAB, RARE and other diseases such as glaucoma, Diabetic retinopathy, eye injuries, childhood blinding diseases, conjunctivitis	Districts with trachoma established	Establishment of eye health priority disease prevalence
		Prevalence of priority eye diseases	



### 3.4: KEY RESULT AREA 3: HUMAN RESOURCES DEVELOPMENT AND RETENTION FOR EYE HEALTH

#### CURRENT STATUS:

There are 27 Ophthalmologists, 16 in the Public Sector and 11 in the Private Sector. Zimbabwe has over 137 Ophthalmic nurses and approximately 35 of them work in the private sector. Each province has an average of 3-8 OPNs. There are 3 Cataract Surgeons and all are in the public sector. The private sector houses 28 Optometrists; none are in the public sector. Refractionists from Council for the Blind were deployed at provincial and 2 central hospitals. All nurses and doctors are trained in basic eye care. There are only 3 Cataract Case Finders in the whole country and they are currently located in Masvingo, Mashonaland East and Manicaland.

#### ACHIEVEMENTS

- 3 Ophthalmologists trained and deployed in the Public Service
- 75 Ophthalmic Nurses (15 OPNs/year) trained, and deployed nationally
- 3 Cataract Surgeons trained and deployed
- Optometrists' participation in the NPBC
- The need to train Nurses in primary eye care recognized, curriculum review carried out
- There were initially 3 Cataract Case Finders trained for Manicaland, Mashonaland East and Masvingo provinces and these have increased to 58 following VHWs training in PEC for Midlands, Matabeleland North and South
- 2 Ophthalmic Nurses in Gwanda and Kwekwe trained in refraction by the Zimbabwe Council for the Blind

#### LIMITATIONS

- No pediatric trained ophthalmologist and ophthalmic nurses
- Only 2 training Institutions (one for OPNs and the other for ophthalmologists)
- Inequitable distribution of eye specialists
- Inadequate funding for Eye Health personnel training and skills upgrades
- No training school for optometry and no posts for optometrists in the

public sector

- Limited in-service training in Primary Eye Care for Nurses
- Freezing of Civil Service posts by the Ministry of Finance
- Inadequate government funding
- Low output performance of Eye Health cadres due to inadequate supply of consumables and other resources
- No staff establishment posts for OPNs in the public sector
- Limited number of Village Health Workers trained in PEC in Zimbabwe

Objectives	Strategic Activities	Output indicator	Outcome Indicator
To increase number of trained eye specialists (OPNs, ophthalmologists, optometrists, cataract surgeons, low vision therapists by 2018, in line with WHO recommendations	Establish optometry school at UZ	20 Optometrists trained	Eye health specialists staffing levels in line with WHO guidelines
	Training of 4 ophthalmologists/year	<ul style="list-style-type: none"> <li>• 4 Trained</li> <li>• Number of Ophthalmologists in public service</li> </ul>	
	Training of 20 cataract surgeons (GMOs / Clinical Officers)	Number of districts each with a cataract surgeon	Improved access to specialist eye health care services in all the provinces
	Training of ophthalmic nurses	Each district with at least 2 OPNs	
	Lobby for training of low vision therapists	One low vision therapists/ per province	
	Development of Human Resource for Paediatrics Eye Health ( ophthalmologists, OPNs and Orthoptists)	Number of pediatric ophthalmologists and OPNs trained	
	Lobby for the establishment of national and provincial posts for Optometrists	Number of optometrists posts established	
To develop human resources for PEC integration into PHC by 2018	Training of 2,710 nurses at all levels in primary eye care for each rural health Centre and 10/district and provincial hospital	Number of nurses trained in PEC	Integration of PEC into PHC
	Training of 90 nurse tutors in PEC	<ul style="list-style-type: none"> <li>• Number of nurses trained in PEC</li> <li>• Number of nurse tutors trained in PEC</li> </ul>	
	Training of 16,000 Village Health workers in PEC including cataract case finding	# of VHWs trained in PEC and cataract case finding	
	Reviewing of the nurses training curricula (PCN and General Nurses)	Curricula reviewed	
	Reviewing of the VHW curriculum to include reviewing of supportive supervisory checklists for nurses, VHWs to include PEC	Supportive supervisory checklists reviewed	

### 3.5: KEY RESULT AREA 4: INFRASTRUCTURE, EQUIPMENT AND MEDICINES

#### CURRENT STATUS:

Three central hospitals with functional eye units, viz:

- United Bulawayo Hospitals - Richard Morris Eye Unit
- Parirenyatwa - Sekuru Kaguvi Eye Unit
- Chitungwiza Central Hospital - Eye Unit

There are Eye units in each of the eight rural provinces. Zimbabwe Defence Forces has Eye Units at Manyame Air Base, KGVI and at Mbizo Barracks in Bulawayo.

Outreach services provided by Council for the Blind in partnership with the Ministry of Health. There are 8 Schools for the Blind in the country.

#### ACHIEVEMENTS

New partnership with EC and Sightsavers since 2010 which provided

- Capital equipment (operating microscopes, slit lamp, ophthalmoscopes, and an anterior vitrectomy machine,) at Sekuru Kaguvi Eye Hospital and school of nursing bus for OPN trainees follow-up
- Reference literature for training students in eye health
- Basic eye instruments for OPNs within the project provinces
- Cataract surgery consumables and surgical instruments for training of Cataract Surgeons
- The Ministry of Health and Child Care, under the Targeted Approach, purchased the following for Central and Provincial hospitals:
  - Operating microscopes
  - Auto refractor and phoropter
  - Slit lamps
  - Autoclave sterilisers
  - Renovation and expansion of Chitungwiza Eye Unit in partnership with the Republic of China Government, MoHCC built and equipped Mahusekwa District Hospital which includes an eye unit. The Chinese Government donated an assortment of operating equipment including a phacoemulsification machine to the ZDF.
- CBM has undertaken to put up an Eye Unit at Marondera Provincial

Hospital, Norton Hospital in Mashonaland West and a Paediatric Eye Unit at UBH in collaboration with Council for the Blind. A partner will also be refurbishing an Eye Unit at Bindura Provincial Hospital.

#### LIMITATIONS:

- Two central hospitals namely, Mpilo and Harare Central have no Eye Units
- Three Eye Units (Gweru, Bindura & Marondera) do not have dedicated eye theatres, wards
- All provinces have no vehicles for outreach programs
- Inadequate equipment, consumables, low visual aids and medicines for eye health services
- No laser treatment equipment at UBH and the Provinces. Laser treatment is centralised at Parirenyatwa Hospital
- No local capacity for intra-ocular lens and prosthetic eye production

Objectives	Strategic Activities	Output Indicator	Outcome Indicator
To provide eye health institutions at all level with basic infrastructure, equipment, medicines and technologies by 2018	Establish eye units within Harare and Bulawayo city health departments	Number of eye units established in Harare and Bulawayo City Health	80% of the citizens of Zimbabwe have access to comprehensive eye health services from established and adequately equipped eye units by 2018
	Strengthen role of UBH and Parirenyatwa as tertiary eye health referral centres	UBH and Parirenyatwa functioning as tertiary eye health referral centers	
	Establish dedicated eye health theatres in all provinces	Number of provinces with dedicated eye theatres.	
	Establishment of functional Eye Units in all provinces	Number of provinces with functional Eye units	
	Provision of equipment, medicines and other consumables by level of care	Number of Units with adequate equipment, medicines and other consumables according to level of care.	
	Provide dedicated vehicles for eye health outreach in all provinces, at 1 per District	Number of Districts with a dedicated vehicle for eye health outreach	
	Partnerships development for resource mobilisation for eye health	Number of partners supporting eye health	



### 3.6: KEY RESULT AREA 5: PROGRAMME COORDINATION

#### CURRENT STATUS

There is a National Prevention of Blindness Committee with limited multisectoral participation. There is, however, no such structure at both provincial and district level and this has contributed to fragmented eye services delivery in the country with other areas not served at all.

#### ACHIEVEMENTS

- The presence of the NPBC  
NPBC Meetings have been held regularly
- Appointment of Provincial NCDs focal points to facilitate programme activities coordination

#### LIMITATIONS

- NPBC has limited multisectoral participation and no such structure exists at provincial and district level
- Coordination of services provision remains a challenge
- NCDs focal points participation still weak
- Currently no provincial and district annual plans on eye health

Specific Objectives	Strategic Activities	Output Indicator	Outcome Indicator
To improve Eye Health programme activities coordination at all levels by 2018	Strengthen multisectoral participation	Multisectoral participation at all, levels	Improved eye Health programme activities coordination
	Strengthen NPBC		
	Establishment of Provincial and District Blindness Prevention Committees	District and provincial Committees in place	
	District and provincial level incorporate Eye Health in their annual plans	District and provincial plans in place	

### 3.7: KEY RESULT AREA 6: RESOURCE MOBILIZATION

#### CURRENT STATUS

There is no specific budget for the National Eye Health programme; available funding is lumped together with other services or programmes. Funding for health in Zimbabwe remains low and has still not reached the 15% of total national budget as ratified by the Zimbabwe Government in the Abuja Declaration. Partnership development for eye health remains low.

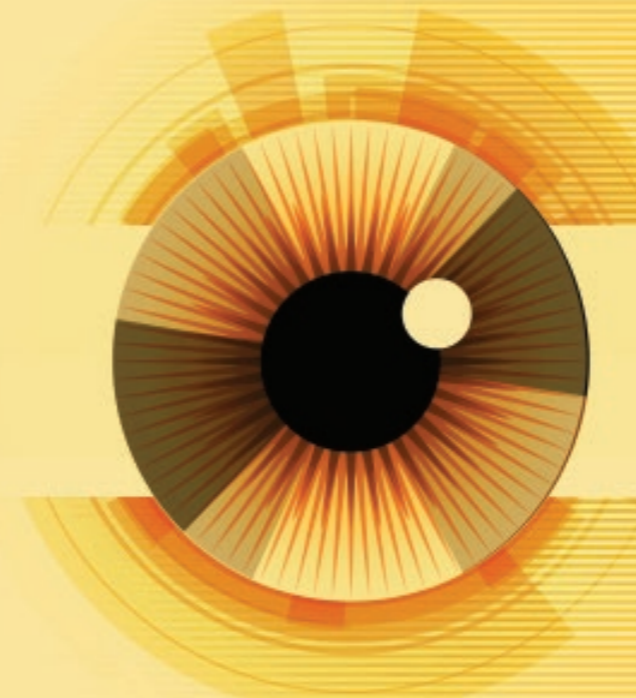
#### ACHIEVEMENTS

- New partnerships have been developed with EC, Ministry of Defence, Help Age Zimbabwe, Sightsavers and continued support from old partners: Council for the Blind, CBM, Lions Club, Zimbabwe Optometric association
- Establishment of the Eye Health Advocacy Coalition with support from EC
- NPBC mobilises resources for cataract surgery-specifically for Eye Camps

#### LIMITATIONS

- There is no specific budget for the National Eye Health programme
- Partnership development for eye health remains low
- Currently no provincial and district annual plans on eye health

Specific Objectives	Strategic Activities	Output Indicator	Outcome Indicator
To increase resource availability for eye health by 2018	Advocacy for resource mobilization	Number of advocacy meetings	Availability of increased resources
	Partnerships (locally, regionally and internationally) development for eye health	Number of partners supporting eye health	



## SECTION 4: MONITORING AND EVALUATION FRAMEWORK

### KEY RESULT AREA (KRA) 1: PREVENTION AND CONTROL OF EYE DISEASES AND CONDITIONS

<b>OBJECTIVE 1:</b>	To reduce the prevalence of childhood blindness from 7/10,000 to 3/10,000 by 2018
<b>OBJECTIVE 2:</b>	To offer broad based institutional and community rehabilitation services throughout the strategy implementation period
<b>OBJECTIVE 3:</b>	To increase access to diabetes prevention and control services nationally
<b>OBJECTIVE 4:</b>	To reduce the cataract backlog of 60,000 by 80% by the end of 2018
<b>OBJECTIVE 5:</b>	To reduce refractive error burden from 10.82% to 7% by 2018
<b>OBJECTIVE 6:</b>	To increase access to routine screening and management services for Glaucoma to 80% of the estimated 5,000 cases by 2017
<b>OBJECTIVE 7:</b>	To reduce eye injuries by 80%
<b>OBJECTIVE 8:</b>	To eliminate blindness from Trachoma by 2018
<b>OBJECTIVE 9:</b>	To develop rehabilitation services for the low-vision and the blind at all levels of care by 2018
<b>Impact 1:</b>	Reduction in the incidence and prevalence of avoidable blindness in the general population
<b>Impact 2:</b>	Improved quality of life amongst the blind and visually impaired



Impact Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Number of individuals with blindness or visual impairment[6] for at least 6 months per 1,000 population	ND					↓20%	ZDHS /MIMS/ Disability Survey	ZimStat, MoHCC	Five Years
							Reports		Annually
Number of children who are blind per 10,000 children	7/10,000					3/10,000	ZDHS/MIMS Disability Survey Reports	ZimStat, MoHCC	Five Years
Incidence of blindness due to cataracts	ND					↓5%	HMIS, ZDHS Survey Reports	MoHCC	Annually, five years
Incidence of blindness due to diabetic retinopathy	ND					↓5%	HMIS, Programme Reports	MoHCC	Annually
Cataract Surgical Rate (CSR)[7]	450	800	1000	1500	1800	2000	HMIS	MoHCC	Annually
% of blind and visually impaired individuals scoring above 50% on the BVI Quality of Life Index[8]	ND	50%	60%	70%	75%	85%	ZDHS, Special Studies, Documentations	ZimStat, MoHCC	Annually
<b>Outcome 1:</b> Improved access to EH prevention and control services									
<b>Outcome 2:</b> Improved quality of eye health care in line with evidence from clinical research and adherence to QoC standards and guidelines									
<b>Outcome 3:</b> Improved case management and referral at the community level									
<b>Outcome 4:</b> Improved uptake/utilisation of available eye health care services									
<b>Outcome 5:</b> Improve early detection of risk factors (STI, Diabetes, Trachoma), eye diseases and blindness									
<b>Outcome 6:</b> Reduced cataract surgery backlog									
<b>Outcome 7:</b> Reduction in childhood blindness									
Outcome Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
% of health facilities providing minimum package of EH prevention and control services at each level of care	ND	50%	55%	60%	65%	80%	Quality of Care Assessments	MoHCC	Annually

Outcome Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
% of health workers demonstrating adherence to management Guidelines	ND[9]	50%	60%	70%	80%	100%	Quality of Care Assessments	MoHCC	Annually
% of estimated cases receiving glaucoma services	ND	50%	55%	60%	65%	80%	HMIS	MoHCC	Annually
Cataract Surgery Coverage (CSC)	ND	40%	50%	60%	70%	80%	HMIS	MoHCC	Annually
Percentage of patients seen classified as having positive cataract surgical outcomes	ND					80%	Post Operative Assessments, HMIS	MoHCC	Annually
Number of patients receiving appropriate management for STI, Diabetes, Trachoma and other eye diseases	ND	↑15%	↑25%	↑35%	↑50%	↑75%	HMIS	MoHCC	Annually
Number of Trachoma cases per 10,000 Pop.	ND					0%	HMIS	MoHCC	Annually
Number of eye injuries per 10,000 children per year	ND						HMIS	MoHCC	Annually
Prevalence of Refractive Error	ND						Survey Reports	MoHCC	Five Years
% of clients satisfied with EH services	ND					85%	Exit Interview & Suggestion Boxes Reports, Surveys	MoHCC	Quarterly /Annually
<b>Output 1:</b> Improved availability of essential EH prevention and control services at primary, secondary and tertiary levels of care									
<b>Output 2:</b> Improved access to cataract surgical services									
<b>Output 3:</b> Increase in refractive error correction and rehabilitation services									
<b>Output 4:</b> Improved availability of functional equipment and medications for EH prevention and control									
<b>Output 5:</b> Management guidelines for quality EH prevention and control in place and utilised									
<b>Output 6:</b> Improved awareness and knowledge of eye disease and blindness prevention and control practices; and available services within the population									
<b>Output 6:</b> Strengthened integration of PEC into PHC at all levels of the health system									
<b>Output 7:</b> Functional referral system									



Output Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Number of health facilities providing PEC services	71						Programme Reports	MOHCC	Annually
Number of Refractive Error delivery points	10						Programme Reports	MOHCC	Annually
Number of health facilities providing blindness and low vision rehabilitation services (by facility type)	ND						Programme Reports	MOHCC	Annually
Number of facilities offering diabetes laser treatment	1						Programme Reports	MOHCC	Annually
Number of Nurses and VHWs trained in PEC	VHWs: 54 Nurses: 58						Programme Reports	MOHCC	Annually
Number of OPNs trained									
Number of OPNs providing eye health care services	107						Programme Reports	MOHCC	Annually
Number of OPNs providing refraction services	2						Programme Reports	MOHCC	
Number of children screened for low vision	ND						Programme Reports	MOHCC	
Number of patients who received spectacles	ND						Programme Reports	MOHCC	
Number of individuals, schools, organizations reached through awareness and health education campaigns	ND						Programme Reports	MOHCC	Annually
Number of registered companies complying with the legislation on use of protective eye wear	ND						Programme Reports	MOHCC	Annually

Output Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Number of children immunized against measles and received 2 doses of Vitamin A supplementation / year	Measles: 428,645 Vit.A Supp: 1130,679						Programme Reports	MOHCC	Annually
No. of new born received Crede Prophylaxis	203,811						Programme Reports	MOHCC	Annually
No. of Ophthalmia Neonatorum managed	4,420						HMIS	MOHCC	Annually
Number of patients reached through outreach visits	ND						Programme Reports	MOHCC	Annually
Number of glaucoma cases detected and managed	ND					4,000	HMIS	MOHCC	Annually
Number of diabetes cases detected and controlled	ND						HMIS	MOHCC	Annually
Number of diabetes retinopathy cases detected	ND						HMIS	MOHCC	Annually
Number of diabetic patients who had visual assessment annually	ND						HMIS	MOHCC	Annually
Number of hypertensive and HIV screened for diabetes	ND								
Number of hypertensive and HIV had visual assessment	ND						HMIS	MOHCC	Annually
Number of individuals with low vision and blindness who received rehabilitation services							HMIS	MOHCC	Annually



Output Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Existence of Management Guidelines		IP <sup>[10]</sup>	IP	IP	IP	IP	Programme Reports	MOHCC	Annually
Number of developmental programs integrating trachoma prevention and control	ND						Programme Reports	MOHCC	Annually

<sup>6</sup> Loss or abnormality of physiological or anatomical structure or function (awareness of signs and symptoms at the organ or function level)

<sup>7</sup> CSR - The number of cataract operations done per million population per year - The Vision 2020 recommendation is that a CSR of at least 2000 should be achieved each year to eliminate unnecessary blindness due to cataract in Africa.

<sup>8</sup> An Index to be developed to measure the Quality of Life (QoL) of individuals with visual impairment and blindness using specific domains of QoL, which include Functional Status (physical being), Psychological Wellbeing, Belonging (stigma) and Becoming (actively participating in activities).

<sup>9</sup> ND - No Data

<sup>10</sup> IP - In Place

## KEY RESULT AREA 2: NHIS, RESEARCH, MONITORING AND EVALUATION

<b>OBJECTIVE 1:</b>	To establish priority eye health conditions surveillance by 2018								
<b>OBJECTIVE 2:</b>	M&E incorporated into the strategy.								
<b>OBJECTIVE 3:</b>	To provide evidence based information for policy guidance and programming by 2018								
<b>Impact 1:</b>	Reduction in the incidence and prevalence of avoidable blindness in the general population								
<b>Impact 2:</b>	Improved quality of life amongst the blind and visually impaired								
Impact Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Number of individuals with blindness or visual impairment for at least 6 months per 1,000 population	ND					↓20%	ZDHS/MIMS/ Disability Surveys	ZimStat, MOHCC	Five Years
Number of children who are blind per 10,000 children	7/10,000					3/10,000	ZDHS/MIMS Disability Survey Reports	ZimStat, MoHCC	Five Years
Incidence of blindness due to cataracts	ND					↓5%	HMIS	MoHCC	Annually
Incidence of blindness due to diabetic retinopathy	ND					↓5%	HMIS	MoHCC	Annually
% of the blind and visually impaired scoring above 50% on the Quality of Life Index	ND	50%	60%	70%	75%	85%	ZDHS, Special Studies Reports	ZimStat, MOHCC	Annually
<b>Outcome 1:</b>	The prevalence, burden and patterns of eye diseases established								
<b>Outcome 2:</b>	Improved quality of eye health care in line with evidence from clinical research and adherence to QoC standards and guidelines								
<b>Outcome 3:</b>	Eye health policy development informed by evidence								



Outcome Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Availability of periodic prevalence estimates for specific eye diseases	NIL	IP	IP	IP	IP	IP	ZDHS/MIMS Reports	ZimStat, MOHCC	5 Years
% of cataract surgeries with positive clinical outcomes	ND	50%	60%	70%	80%	90%	NIHFA, Quality of Care Assessment Reports	MOHCC	Annually
Number of eye health policy brief's/technical papers	0	0	1	1	2	3	MoHCW Health Policy Notes	MOHCC, Eye Health Professionals	Annually
<b>Output 1:</b>	M & E System for Eye Health developed and implemented (including database and data collection tools)								
<b>Output 2:</b>	Eye Health Research Agenda developed and implemented								
<b>Output 3:</b>	Eye disease surveillance fully integrated within the National Health Management Information System (HMIS)								
<b>Output 4:</b>	Accurate, timely and adequate information on eye care service utilization and patient outcomes obtained from public and private sector								
Output Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Existence of a functional Eye Health M&E System	NIL	IP	IP	IP	IP	IP	M&E System & SOP Manual, M&E Reports	MOHCC	Quarterly
Existence of an Eye Health Research Agenda	NIL	IP	IP	IP	IP	IP	Research Agenda	MOHCC	Quarterly
% of eye health surveillance indicators (priority eye health diseases only) incorporated in the MHIS	ND	50%	75%	100%	100%	100%	HMIS	MOHCC	Quarterly
% of public facilities providing accurate, timely and complete data on eye health	ND	75%	75%	85%	95%	100%	HMIS	MOHCC	Quarterly
Number of private facilities providing accurate, timely and complete data on eye health	0	10	15	20	25	30	HMIS, Activity Reports	MOHCC	Quarterly

### KEY RESULT AREA (KRA) 3: HUMAN RESOURCES DEVELOPMENT AND RETENTION FOR EYE HEALTH

<b>OBJECTIVE 1:</b>	To increase number of trained eye specialists (OPNs, ophthalmologists, optometrists, cataract surgeons, low vision therapists in line with WHO recommendations by 2018.									
<b>OBJECTIVE 2:</b>	To develop human resources for PEC integration into PHC by 2018									
<b>Impact 1:</b>	Reduction in the incidence and prevalence of avoidable blindness in the general population									
<b>Impact 2:</b>	Improved quality of life amongst the blind and visually impaired									
Impact Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting	
	Baseline	2014	2015	2016	2017	2018				
Number of individuals with blindness or visual impairment for at least 6 months per 1,000 population	ND						ZDHS/MIMS/ Disability Surveys	ZimStat, MOHCC	Five Years	
Number of children who are blind per 10,000 children	7/10,000					3/10,000	ZDHS/MIMS	ZimStat, MOHCC	Five Years	
Incidence of blindness due to cataracts	ND					↓5%	HMIS	MOHCC	Annually	
Incidence of blindness due to diabetic retinopathy	ND					↓5%	HMIS	MOHCC	Annually	
Cataract Surgical Rate (CSR)	450	800	1000	1500	1800	2000	HMIS	MOHCC	Annually	
% of the blind and visually impaired scoring above 50% on the Quality of Life Index	ND	50%	60%	70%	75%	85%	ZDHS, Special Studies	ZimStat, MOHCC	Annually	
<b>Outcome 1:</b>	Improved access to EH prevention and control services									
<b>Outcome 2:</b>	Improved quality of eye health care in line with evidence from clinical research and adherence to QoC standards and guidelines									
<b>Outcome 3:</b>	Improved case management and referral at the community level									





Outcome Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Number of PEC trained health professionals (by discipline- OPNs, General Nurses, Cataract Surgeons) per 10,000 population	ND				WHO	WHO	HRH Audit,	HRH Department, MOHCC	Annually
% of health workers demonstrating adherence to Quality of Care Standards and Guidelines	ND	50%	60%	70%	80%	100%	, Quality of Care Assessments	MOHCC	Annually
% of VHWs providing PEC at community level	54						, Quality of Care Assessments	MOHCC	Annually
<b>Output 1:</b>	Improvement in the numerical adequacy of EH trained nurses, tutors, VHWs and EH specialists								
<b>Output 2:</b>	PEC integrated in pre-service curricula								
Output Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Number of Optometrists trained in country	0					20	Activity Reports	MOHCC	Quarterly
Number of optometrists in the private sector	12								
Number of Optometrist in public sector	0					4	HRH Staff Returns	HRH, MOHCC	Quarterly
Number of Districts with a Cataract Surgeon	2					20	HRH Staff Returns	HRH, MOHCC	Quarterly
Number of paediatric ophthalmologists trained	0						HRH Staff Returns	HRH, MOHCC	Quarterly
Number of OPNs trained	107					300	Activity Reports	MOHCC	Quarterly
% of districts with at least 2 trained OPNs	20					100%	HRH Staff Returns	HRH, MOHCC	Quarterly

Output Indicator (s)	Performance Target						Source/Mean of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Number of optometrists posts established	0					20	HRH Staff Returns	HRH, MOHCC	Quarterly
Number of eye health equipment technicians in-post	0					2	HRH Staff Returns	HRH, MOHCC	Quarterly
Number of Tutors trained in PEC	45					100	Activity Reports	MOHCC	Quarterly
Number of Nurses (RGNs and PCNs) trained in PEC	58					350	Activity Reports	MOHCC	Quarterly
Number of VHWs trained in PEC and Cataract case finding	54					350	Activity Reports	MOHCC	Quarterly

## KEY RESULT AREA 4: PROGRAMME COORDINATION AND RESOURCE MOBILIZATION

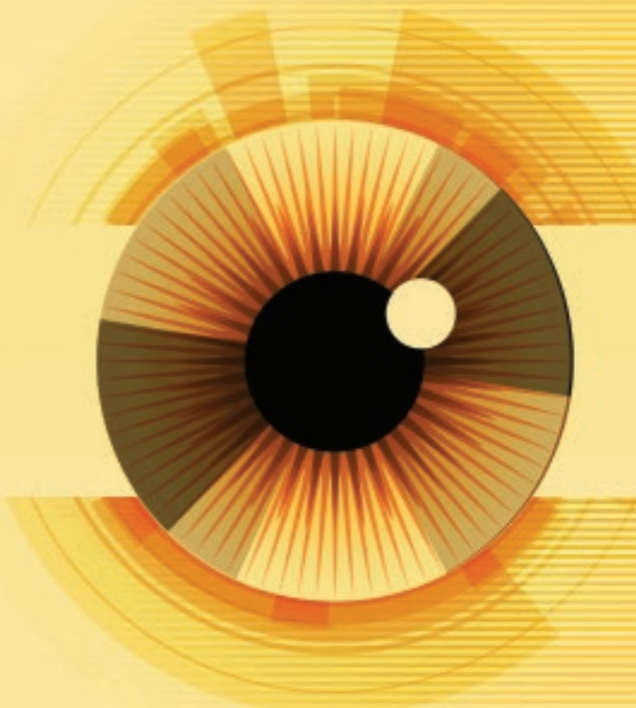
<b>OBJECTIVE 1:</b>	To improve Eye Health programme activities coordination at all levels by 2018								
<b>OBJECTIVE 2:</b>	To increase resource availability for eye health by 2018								
<b>Impact 1:</b>	Reduction in the incidence and prevalence of avoidable blindness in the general population								
<b>Impact 2:</b>	Improved quality of life amongst the blind and visually impaired								
Impact Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Number of individuals with blindness or visual impairment for at least 6 months per 1,000 population	ND					↓20%	ZDHS/MIMS/ Disability Surveys	ZimStat, MOHCC	Five Years
Number of children who are blind per 10,000 children	7/10,000					3/10,000	ZDHS/MIMS	ZimStat, MOHCC	Five Years
Incidence of blindness due to cataracts	ND					↓5%	HMIS	MOHCC	Annually
Incidence of blindness due to diabetic retinopathy	ND					↓5%	HMIS	MOHCC	Annually
Cataract Surgical Rate (CSR)	450	800	1000	1500	1800	2000	HMIS	MOHCC	Annually
% of the blind and visually impaired scoring above 50% on the Quality of Life Index	ND	50%	60%	70%	75%	85%	ZDHS, Special Studies Reports	ZimStat, MOHCC	Annually
<b>Outcome 1:</b>	Improved efficiency and effectiveness in programme coordination								
<b>Outcome 2:</b>	Improved resource (financial, human and material) base for the programme								
Outcome Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
% Activity Timeline Compliance	75%	75%	85%	95%	95%	95%	Programme Reports	MOHCC	Quarterly
% Output Target Compliance	75%	75%	85%	95%	95%	95%	Programme Reports	MOHCC	Quarterly
% of strategy budget that is secured/committed	50%	75%	100%	100%	100%	100%	MoHCW Budgets	MOHCC	Quarterly

Outcome Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
% contribution of partnerships to programme budget	25%	50%	50%	40%	35%	25%	MoHCW Budgets	MOHCC	Quarterly
% contribution of committed treasury funds to programme budget	25%	25%	50%	60%	65%	75%	MoHCW Budgets	MOHCC	Quarterly
<b>Output 1:</b>	Improved multi-sectoral participation in eye health programme activities								
<b>Output 2:</b>	Clear coordination structures at national, province and district levels are established and operational								
<b>Output 3:</b>	Improved awareness of the critical needs and funding gaps by a cross-section of partners and stakeholders								
Output Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Existence of provincial and district Eye Health coordinating committees	0	IP	IP	IP	IP	IP	Programme Reports	MOHCC	Monthly
% of districts with district annual plans on eye health	0	25%	75%	100%	100%	100%	Programme Reports	MOHCC	Monthly
Number of partners/stakeholders reached with key advocacy messages for resource mobilisation	0						Programme Reports	MOHCC	Monthly
Number of partners supporting eye health programme	7						Programme Reports	MOHCC	Monthly

## KEY RESULT AREA (KRA) 5: INFRASTRUCTURE, EQUIPMENT, MEDICINES AND TECHNOLOGIES

<b>OBJECTIVE 1:</b>	To provide eye health institutions at all level with basic infrastructure, equipment, medicines and technologies									
<b>Impact 1:</b>	Reduction in the incidence and prevalence of avoidable blindness in the general population									
<b>Impact 2:</b>	Improved quality of life amongst the blind and visually impaired									
Impact Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting	
	Baseline	2014	2015	2016	2017	2018				
Number of individuals with visual impairment for at least 6 months or blindness per 1,000 population	ND					↓20%	ZDHS/MIMS/ Disability Surveys	ZimStat, MOHCC	Five Years	
Number of children who are blind per 10,000 children	7/10,000					3/10,000	ZDHS/MIMS	ZimStat, MOHCC	Five Years	
Incidence of blindness due to cataracts	ND					↓5%	HMIS	MOHCC	Annually	
Incidence of blindness due to diabetic retinopathy	ND					↓5%	HMIS	MOHCC	Annually	
Cataract Surgical Rate (CSR)	450	800	1000	1500	1800	2000	HMIS	MOHCC	Annually	
% of the blind and visually impaired scoring above 50% on the Quality of Life Index	ND	50%	60%	70%	75%	85%	ZDHS, Special Studies	ZimStat, MOHCC	Annually	
<b>Outcome 1:</b>	Improved access to comprehensive eye health services from established and adequately resourced eye units									
Outcome Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting	
	Baseline	2014	2015	2016	2017	2018				
% of population residing within standard catchment area of functional eye units	ND					80%	HMIS	MOHCC	Annually	
Per capita attendance at eye units	ND						HMIS	MOHCC	Annually	
<b>Output 1:</b>	Improved coverage of facilities providing eye health care services									
<b>Output 2:</b>	Improved availability of essential medicines and equipment for eye health care in facilities									

Output Indicator (s)	Performance Target						Source/Means of Verification	Responsibility in Data Collection & Analysis	Frequency of Reporting
	Baseline	2014	2015	2016	2017	2018			
Number of eye units established							Facility Reports	MOHCC	Quarterly
No. of eye units operating with the minimum supply of equipment, medicines and other consumables	ND						Facility Reports	MOHCC	Quarterly
Number of provinces with dedicated eye theatres	1	3	5	8	8	10	Facility Reports	MOHCC	Quarterly



## SECTION 5: ANNEXES

### ANNEX A: STAKEHOLDERS ANALYSIS

Stakeholders	Their Interest	How their interests affect us	Contribution
The Community (Primary program beneficiaries)	To benefit from eye health services	They are the reason for program's existence	Utilisation of eye health services
	To regain sight	Their right to access quality eye health services	Monitoring and evaluation of eye health services
	Rehabilitation of the visually impaired and the blind		
Council for the Blind	Provides screening services, cataract surgeries and spectacles to the nation	Increased funding translates to increased coverage on eye health care service provisions but lack of funding subjects people to increased eye health problems	Reduce avoidable blindness on eye health problems among the people of Zimbabwe and sponsor trainings and eye camps
Zimbabwe Optometric Association	Refractive services	Contribute to the comprehensiveness of eye health care services in Zimbabwe	Optometry services (refractive errors and corrective services)
Zimbabwe Defence Forces	Sight restoration for the vulnerable communities	Result in reduced eye health problems	Financial, HR and logistical support
UZ Department of Ophthalmology	Surgeon training, research and community service	Manpower development avails wider accessibility of service and lack of manpower compromises the services in Zimbabwe	Human capital development and community outreach services
HelpAge Zimbabwe	Improvement of eye care services for Older Persons	Policy Advocacy on key issues affecting eye care services and marginalization of older persons	Reduction of eye health problems among the aged



## ANNEX B: SWOT ANALYSIS OF THE EYE HEALTH IN ZIMBABWE

STRENGTHS	OPPORTUNITIES
12 ophthalmologists in the public health sector against a target of 24, according to WHO guidelines	Continued support from partners
Over 100 trained ophthalmic nurses against a target of 120, according to WHO guidelines	Collaboration with Chinese and ZDF
Infrastructure: 1 Training School for Ophthalmologists, and 1 for	Partnership with local NGOs and the private sectors
All provinces have eye health facilities offering at least basic eye health Eye Units in Zimbabwe	11 ophthalmologists in the private sectors
3 Central Hospitals and 8 Rural Provincial Hospitals Health institutions have buildings dedicated for eye unit	28 optometrists in the private sector
Continuous Professional Development amongst the Eye cadres	Renewed interest in Neglected Tropical Diseases
Community Based Rehabilitation	Proposed UZ School of Optometry
Dedication and commitment from the remaining eye health	
Existence of 2 pediatric units	
WEAKNESSES	THREATS
Inequitable distribution of ophthalmic staff (OPNs,	Global economic recession
Inadequate resources allocated for Eye Health	Low funding from Donors for Eye Health
Low awareness on Eye Health	Socio cultural practices that reduce healthy seeking behavior amongst communities
Lack of coordination of Eye Health players	Technological challenges
Very limited Research on Eye Health	Political instability
Lack of eye health advocacy	
Unattractive conditions of service resulting in inability to retain manpower	

Stakeholders	Their Interest	How their interests affect us	Contribution
Sightsavers	Complement government funding to eye care services	Availability of funding results in attainment of targets and inadequate funding compromises eye health services	Financial and technical support to government
	To increase access to eye care services		
European Commission	Integration of PEC to PHC	Provision of funding improves access to eye care services	Financial contribution
Eyes for Africa	Prevention of avoidable blindness	Wider access to eye care resources	Provision of Screening and cataract surgery services
CBM	Retention of human resources for eye health, supporting cataract surgery with consumables. Supporting establishment and equipping of eye health institutions	Sustainability challenges both in human resource retention and cataract surgery coverage	Increasing access to cataract surgeries in 3 provinces
Rotary Club of Avondale	Support eye camps, infrastructural development	Support improving access to eye health services (cataract surgeries)	Reduction of cataract surgery backlog
		Sustainability challenges in the absence of funding	
Lions Club	Support eye camps, infrastructural development	Support improving access to eye health services (cataract surgeries)	Reduction of cataract surgery backlog
		Sustainability challenges in the absence of funding	
Ministry of Labour and Social Services	To ensure vulnerable groups access eye health services by paying for services	Increase access to eye health services. Sustainability challenges in the absence of funding	Reduction of burden of blindness and other eye disease conditions
Ministry of Primary & Secondary Education	Provide screening services through the school psychological services	Identification of blind and visually impaired children	Improve access to eye health services
	Provision of education to the blind and visually impaired	Integration of the blind and visually impaired into community and attaining their maximum potential	The blind and visually impaired attaining their maximum potential
	Support dissemination of information on health through school children	Awareness creation on eye health services	Reduction of burden of avoidable eye health diseases and conditions

## ANNEX C: LIST OF PARTICIPANTS IN THE DEVELOPMENT OF THE NATIONAL EYE HEALTH STRATEGY

Name	Designation	Organisation
Dr. B Macheke	Chief Government Ophthalmologist	MoHCC-Parirenyatwa Group of Hospitals/ SKH
Dr. Archibald Kufa	Senior Government Ophthalmologist	MoHCC-Parirenyatwa Group of Hospitals/ SKH
Dr. Aaron T. Magava	IAPB Southern Africa Co-Chair and Senior Government Ophthalmologist	IAPB / MoHCC- Mashonaland East
Ms. Clemenciana Bakasa	Deputy Director	MoHCC- NCDs Unit
Mrs. Lilian Muchena	Programme Manager	MoHCC- NCDs Unit
Mr. Lee Nkala	Programme Manager	MoHCC- NCDs Unit
Mr. Elijah Marambo	Programme Implementation Specialist	Sightsavers- ECSA
Mr. Peter Bare	Programme Manager	Sightsavers- Zimbabwe
Mr. Tapiwa Huye	Regional Programme Coordinator	Sightsavers- ECSA
Mrs. Priscilla Gavi	Executive Director	Help Age Zimbabwe
Mr. Adonis Faiji	Programme Manager	Help Age Zimbabwe
Mr. Conrad Gweru	Advocacy and Communications Officer	Help Age Zimbabwe
Mr. Chris Kumora	Secretary	Zimbabwe Optometrist Association
Mrs. Susan Shonhiwa	Senior Tutor	Parirenyatwa School of Nursing
Mr. Aplos Nyathi	Director	Council for the Blind
Mr. Ziyelle Ndlovu	Eye Coordinator	Council for the Blind
Mrs. Felicitas Banda	Administrative Secretary	Council for the Blind
Prof. Ranganai Masanganise	Consultant Ophthalmologist	UZ- Ophthalmology Department
Mr. Sunboy Rupiya	Administrator	UZ- Ophthalmology Department
Mr. Benjamin Benjamin	NCDs Focal Person	MoHCC PMD Midlands
Ms. Phumuzile Ncube	NCDs Focal Person	MoHCC – PMD Matabeleland South
Mr. Joseph Moyo	NCDs Focal Person	MoHCC- PMD Matabeleland North
Ms. Cynthia M. Z. Chasokela	Director Nursing Services	MoHCC
Mr. R Juru	OPN AFZ	Air Force of Zimbabwe
Mrs. Regina Kanyemba	Principal Tutor	Parirenyatwa School of Nursing
Ms. E Nyamakura	SIC – OPN	Chitungwiza Central Hospital
Mrs. Irene R. Sambo	Principal Tutor	Harare Central Hospital
Ms. L. A. Chipiro	OPN	Harare Central Hospital
Mr. Nhamo Vitalis Jaravaza	Statistical Officer	MoHCC
Mr. T. Tavaya	Clinical Officer	Gweru City Council
Ms. T. Simbanegavi	Rehabilitation Officer	MoHCC Matabeleland North
Ms. G. Simbarewamwe	A/ PHPO	MoHCC Matabeleland South
Mr. G. Togara	Accountant	MoHCC
Mrs. L. Hwenje	Senior Executive Assistant	MoHCW
Mr. K. Khupe	OPN	MoHCW Matabeleland North
Dr. W.T. Jana	Senior Government Ophthalmologist	UBH

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