Sightsavers

Sightsavers' Eye Health Strategy

2013 – 2018

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Acknowledgements

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Abbreviations and Acronyms	
APOC	African Programme for Onchocerciasis Control
CDD	Community Directed Distributors
CHW	Community Health Workers
DM	Diabetes Mellitus
DR	Diabetic Retinopathy
HMIS	Health Management Information System
HRD	Human Resource Development
HReH	Human Resources for Eye Health
HSS	Health Systems Strengthening
IAPB	International Agency for the Prevention of Blindness
IEC	Information Education Communication
IOL	Intra Ocular Lens
MDG	Millennium Development Goal
MDP	Mectizan® distribution programme
SAFE	Surgery, Antibiotics, Facial cleanliness, Environmental Improvement
TSO	Technicien Superieur en Ophthalmologie
WATSAN	Water and Sanitation
WHO	World Health Organization

Contents

Executive summary

This strategy is guided by Sightsavers' Strategic Framework 2012 – 2018 and draws on the organisation's range of technical, research and policy expertise. It provides a clear vision on how the organisation will move forward over the next five years, where we will invest resources, and how we will work with a variety of stakeholders to achieve one of its ultimate aims and aspirations: *Governments will ensure that quality eye care is universally available to all people as an integral part of wider health systems.*

Sightsavers sees this aspiration being met by a combination of:

- Governments providing these services themselves and/or;
- Governments fostering the conducive political, legislative, policy and economic environment which will allow other organisations to develop and sustain these services in a manner which is accessible to all members of the community – including the poor, socially marginalised, and disabled.

Sightsavers will work with and advocate with governments and all relevant stakeholders to support and strengthen health systems, and provide policy support and guidance to make these objectives achievable.

We believe that it is with a combination of these elements that the needs of the population in eye health can and will ultimately be met.

To provide the evidence that these ambitious aims are achievable, we will work with partners in selected geographical areas and districts to demonstrate interventions for eye health which are scalable, adaptable and cost effective. We will design and implement these interventions to strengthen and support the health systems, and contribute to the evidence base for policy and advocacy.

Health systems function within different cultural, socio-economic and political contexts and we will work to ensure that our programme and advocacy work are developed to reflect and respond to these contexts.

We will not be replicating services that are already working well, nor will we be paying fees for patients to access services outside of a systems' strengthening approach. Through a commitment to strengthening the health system, we aim to improve the coverage, accessibility and quality of services which are already there, and support the development of services where they do not exist.

Sightsavers will apply these outlined principles to district and urban eye health programmes designed to meet the needs of the population in the geographical areas in which we work. The district programmes will involve the development of services which cover various levels of the health service delivery system from the community through primary, secondary and tertiary eye health services. The urban programmes will increase access of eye health services to underserved communities within these settings. These programmes will deliver the range of health services required to respond to local prevalent conditions and diseases, including health promotion, screening to detect asymptomatic persons, early treatment of eye diseases and referral for more complex diseases.

We will support interventions which include the following:

- Improving patient experience in accessing cataract surgery and improving quality of clinical service as a strategy to improve uptake and increase cataract surgical rates. Low cataract surgical rates are still a major concern, especially in Africa.
- Improving the evidence base on barriers to the uptake of refractive error services, focusing on creating sustainable cost-effective solutions.
- Demonstrating low vision services effectively integrated into broader health, education and social inclusion services.
- Integrating eye health into child health promotion and primary health activities, as well as into school health activities and programmes. Sightsavers will engage with the education sector to demonstrate how children with visual impairment are able to receive education within the normal school system to optimise their visual capability.
- Prioritising holistic public health programmes in Asia which demonstrate how to integrate health promotion and education with screening and treatment services for the control of diabetic retinopathy.
- Piloting programmes for the control of blindness from glaucoma in Sub-Saharan Africa through


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integrating health promotion, early case detection and treatment into existing district eye health services.

- Working to eliminate neglected tropical diseases through 'fast track' initiatives in onchocerciasis and trachoma. These initiatives will mobilise significant resource to achieve elimination targets and reduce avoidable blindness.
- Addressing the human resource for eye health crisis in Sub-Saharan Africa: Sightsavers is working closely with the International Agency for the Prevention of Blindness to promote and support the development of strategies to address this workforce shortage.

Key factors for the success of the strategy will include high quality programme development, with robust evidence generation through investment in high quality research.

Finally, policy and advocacy are vital components in achieving quality eye health for all, and our work in improving eye health depends on strong advocacy at every level, working with and influencing the policy environment in order to achieve the enabling environment necessary for these changes to occur.

Our strategy is flexible and adaptive towards changes in the international development landscape, as outlined in Annex I. This adaptability will help ensure the strategy remains valid and Sightsavers retains a credible and leading role in the promotion of quality eye health globally.

1 Introduction

Sightsavers has a long and proud history of promoting eye health around the world. Our role in eye health has changed over the past 60 years and this change has been both a reflection of, and a reaction to, the expanding scope of global priorities in eye health. An increased importance has been given to the role that national governments can, and should, play in managing eye health. It is imperative that Sightsavers positions its own work within the broader context of the response by other development agencies, professional bodies, private, philanthropic, and multi-lateral organisations and agencies. Sightsavers' ambition is to act as both a catalyst for change as well as a significant contributor to the collective global efforts to reduce the burden of eye disease.

Sightsavers' strategy – *Making the Connections, Strategic Framework 2012-2018* – clearly articulates the large scale change Sightsavers wants all its work in eye health to achieve. **'Governments will ensure that quality eye care is universally available to all people as an integral part of wider health systems.'** It also describes Sightsavers' approach towards achieving that change: **'Demonstrate approaches to eye health which are scalable, adaptable and cost effective, and which strengthen and support the overall health system.'**

Sightsavers' Eye Health Strategy (the strategy) has been developed based on what Sightsavers has learnt from our history as well as the first period of implementing the organisational strategy (2009 – 2013). This strategy provides the clarity, focus and rationale for Sightsavers' investment in eye health during the period 2013 – 2018.

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2 Why we do what we do

2.1 The global eye health context

285 million people are visually impaired worldwide, 246 million have moderate to severe impairment of vision and 39 million are blind.[1] 90% of people who are visually impaired or blind live in developing countries.

123 million are visually impaired from **uncorrected refractive error** (URE), the leading cause of visual impairment, and an additional 517 million functionally impaired by presbyopia.[2]

Cataract is still by far the leading cause of blindness with an estimated 18 million people blind in both eyes from cataract, while **glaucoma** is the second most common cause of blindness, responsible for 10 – 15% of global blindness (6-7 million people),[3] and is the leading cause of irreversible blindness in Sub-Saharan Africa.

Globally, **age-related macular degeneration** ranks as the third most common cause of blindness, and is the primary cause in industrialised countries.[4] However, with the high prevalence of cataract, glaucoma and corneal blindness in developing countries, the relative burden from these three diseases in developing countries is much higher.[4]

Diabetes mellitus (DM) was estimated to affect approximately 2.8% of the world population in 2000 and the prevalence is estimated to rise to about 4.4% by 2030.[5] The increase is expected to involve all regions of the world but particularly developing countries. **Diabetic retinopathy** (DR) is a blinding complication of DM affecting an estimated 40% of diabetics aged 40 and older, of which 8.2% have an advanced, vision-threatening form of the disease.[6] DR is estimated to be responsible for approximately 4.8% of the blindness caused by eye diseases worldwide, 3 – 7 % in much of South East Asia and less than 1% in most of Africa.[7] The increasing prevalence of DM indicates an increased burden of visual impairment due to DR in the coming decades.

Corneal blindness accounts for about 5.1% of global blindness, most of which is in developing countries from preventable diseases which cause scarring of the cornea. Trachoma and onchocerciasis, two of the neglected tropical diseases (NTDs), are responsible for most of this burden of preventable blindness.

Trachoma is an infectious disease associated with poverty. 40.6 million people are estimated to be suffer from active trachoma with 8.2 million estimated to have trichiasis[8] with an estimated 5 million in Africa. Of this 8.2 million, 1.2 million people are estimated to be blind from trachoma and 2.2 million visually impaired, representing 3% of the global burden of blindness. Trachoma is a very focal disease. In a typical endemic country, there are relatively developed urban areas with a negligible burden of disease, while in rural endemic areas, the prevalence of active trachoma is between 60% – 90%. The disease particularly affects the most vulnerable in the community – women and children[9] and the poorest people and communities.

Onchocerciasis, the world's second-leading infectious cause of blindness, is a parasitic disease caused by infection by a parasite (*Onchocerca Volvulus*). The parasite is transmitted to humans through the bite of a black fly, which injects immature larval forms of the parasite. The burden of visual impairment and loss of productivity from **onchocerciasis** (river blindness) is greatest in Africa, where 120 million people in 133,000 communities are at risk. Of these, 37 million are already infected, with 500,000 with visual impairment and 300,000 blind.

The prevalence of **blindness in children** is estimated to be 3-15 per 10,000[10] and it is estimated that 19 million children are visually impaired. Cataract is the leading cause of blindness in children and refractive error is the leading cause of visual impairment. Retinopathy of prematurity is a potentially blinding eye complication of oxygen therapy in pre-term infants. The incidence of this disorder is of increased public health significance in some countries of Asia due to improved survival rates of pre-term babies.

Corneal blindness from infectious causes is also a significant public health problem affecting children. It is often precipitated by the triad of vitamin A deficiency, malnutrition and measles.

The social and economic impact of children with visual impairment is anticipated to be much greater than the prevalence figures might suggest as children live for much longer with their disability than adults. Visual impairment is a contributory factor to higher under five mortality rates.

Low vision, affects an estimated 124 million people globally.[11]


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Milder eye complaints, such as infections and allergies, do not commonly result in visual impairment, but may cause discomfort, requiring treatment and/or result in a loss of productivity. These 'ocular morbidities,' are extremely prevalent in all age groups can create an unnecessary burden on weak health systems, as they can often be prevented or treated cost-effectively at primary health levels.

2.2 Economic impact

The burden of blindness and visual impairment globally has a huge impact on household, community and national economies. Visual impairment leads to reduced ability to participate in social activities and reduced educational opportunities, leading to social and economic exclusion. This affects overall economic productivity and individuals' livelihoods.

Research by Frick and Foster estimates the costs of global blindness and low vision at $42 billion in 2000. Without a decrease in the prevalence of blindness and low vision, it was projected that the total annual costs would rise to $110 billion by 2020. However, with an effective VISION2020 intervention, this would be reduced to only $57 billion in 2020. This equates to an overall global saving over 20 years of US$223 billion.[12]

The situation is even more dramatic in developing countries such as India, where it is estimated that the annual loss of gross national product (GNP) due to blindness is US$4.4 billion, which amounts to 1.4% of GNP. As 80% of all blindness and visual impairment can be prevented and/or treated, much of the negative impact of ocular morbidities can be avoided for significantly lower cost.

Recent economic analyses by PwC have showed that it would take only an additional US$2.20 per capita each year for ten years to eliminate avoidable blindness in developing countries, with an estimated benefit of at least $517.1 billion (2009 USD). This significantly outweighs the additional investment required ($128.2 billion 2009 USD), **a cost-benefit ratio of some 4.0 times the cost.**[13]

2.3 Inadequate national response

In many low and middle income countries, eye health is not fully integrated into national health and development systems and strategies. Where it has been included, national eye health policies often have insufficient political and financial influence to deliver effective, safe, good quality eye health services to meet the needs of the population.

Health system challenges exist in both the supply and demand sides of health services. Supply-side health system challenges include barriers relating to the availability and distribution of trained eye care providers, lack of essential equipment, and supply chain limitations which impact the provision of quality and affordable consumables, including spectacles and ocular medications.

Demand-side challenges include the lack of awareness among communities of the presence and/or benefit of eye health services, as well as attitudes towards these services. The direct and indirect costs of accessing services are often not affordable by the poorest and marginalised persons in the community, including persons with disability. Persons living with disability are particularly affected by the lack of an integrated approach between clinical care and rehabilitation, education, and social services.

The World Health Organization (WHO) endorsed action plan, (*Universal Access to Eye Health: A Global Action Plan 2014–2019*) is a critical resource to help guide governments, international partners and civil society action. It aims to *"sustain and expand efforts by Member States, the WHO Secretariat and international partners in further improving eye health at community and national levels… and provides a global framework which contributes to the efforts to eliminate avoidable blindness and visual impairment as a major public health problem through the provision of comprehensive eye care services"*. Sightsavers endorses the global action plan and contributed to its development.[14]

3 Sightsavers' approach to improving access to quality eye health services

Universal access or Universal coverage for eye health – means that all people have access to quality eye health services, regardless of their gender, disability, age, ethnicity and socio-economic status, at a cost which is affordable

3.1 The paradigm shift

Sightsavers' vision is one where *'no-one is blind from avoidable causes and visually impaired people participate equally in society'*. In Sightsavers strategy, Making the Connections and its *Strategy Implementation Monitoring Card* (SIM), Sightsavers made a paradigm shift in its modus operandi from a singular emphasis on service delivery to address immediate need, towards a development approach with a strong emphasis on systems strengthening – building on our experience and partnerships as a member of the Vision 2020 alliance. Through focusing on systems strengthening, Sightsavers aims to ensure a greater proportion of the population have access to sustainable, good quality eye health services. Supporting service delivery alone has an impact limited to the geographical focus of operation and is often dependent on external assistance. While Sightsavers has always partnered with national and regional government ministries, as well as not-for-profit health care providers, the work has more often been about *supporting* rather than *strengthening* health services and systems.

In our work on NTDs, Sightsavers has also made the paradigm shift in emphasis from the control of blindness to the objective of eliminating onchocerciasis and blinding trachoma.

In the *Guidelines for Aligning Programmes with the Strategy Map*, Sightsavers articulates its approach to strengthening national health systems to incorporate eye health, which is the **development of scalable eye health demonstration approaches that would build the evidence necessary to influence national governments and other decision makers to implement cost-effective approaches at scale**.

There are two areas where Sightsavers highlights as needing additional emphasis to respond to critical areas of development:

- To respond to the imperative of eliminating the burden of blinding neglected tropical diseases, Sightsavers will directly engage in the scaling up of proven approaches through two fast track initiatives (FTIs) for onchocerciasis and trachoma. In our NTD project countries and areas, Sightsavers will also include the mapping of, and treatments for other co-endemic NTDs. These include lymphatic filariasis, schistosomiasis and soil transmitted helminths.

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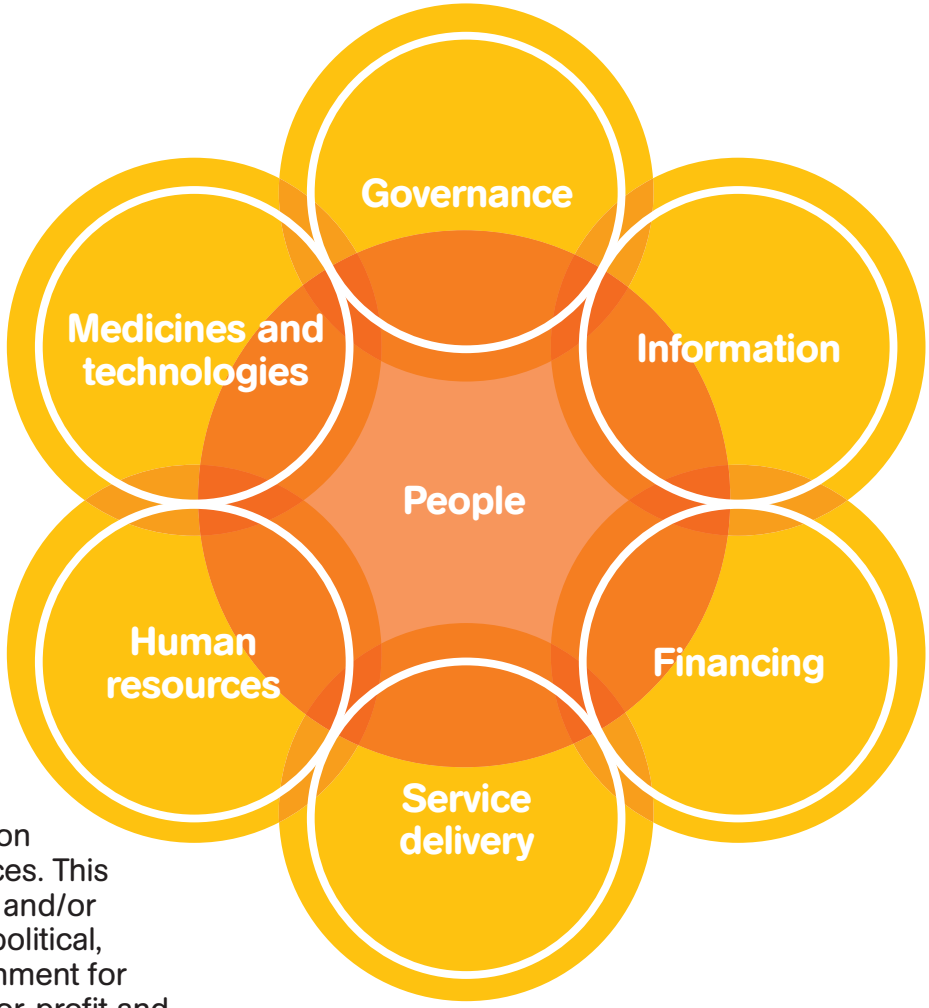
Figure 1: WHO building blocks of a health system



- To address the continental-wide crisis of human resources for eye health (HReH) in Africa, Sightsavers will increase its support to addressing the HReH crisis by supporting a Special HReH Initiative. More details on this special initiative is in section 4.2.2

This strategy outlines how Sightsavers will take forward these approaches in the next period of the strategy implementation period of 2013 – 2018.

3.2 Demonstrating cost-effective interventions

Governments are the primary duty bearers for ensuring that their population have access to quality eye health services. This can be through public sector provision and/or fostering and supporting a favourable political, legislative, policy and economic environment for other organisations, including the not-for-profit and private sectors, to provide services.

Working with governments at the district and national level, Sightsavers aims to identify and implement programmes that demonstrate approaches to providing universally available eye health services within the health system. To influence others to scale up these approaches, programmes need to produce compelling evidence for replication, be appropriate to the local context and be relevant to government departments and other eye health actors.

Sightsavers will support innovation where needed to respond to specific challenges and will design all programmes to gather and share evidence of what does and does not work.

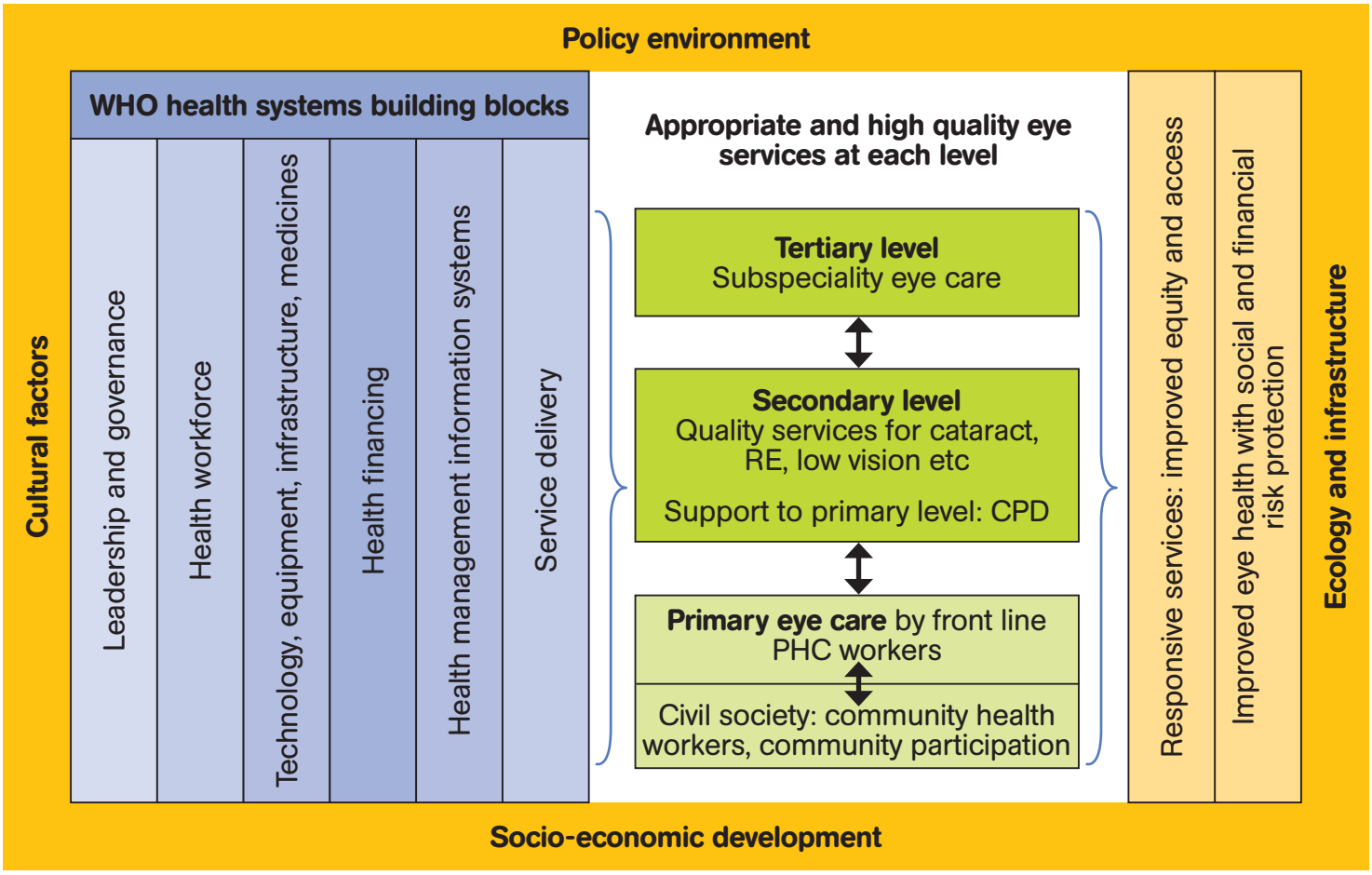
3.3 Health systems' strengthening

A well-functioning health system is critical to good eye health and health outcomes. Sightsavers commits to implementing interventions that address weaknesses in the system or interventions which demonstrate promising strategies or innovations and producing evidence of its effectiveness.

The WHO definition of a health system is 'all organisations, people and actions whose primary intent is to promote, restore or maintain health.'[15] The WHO framework describes six 'building blocks', which are the inter-related elements of the health system (Figure 1). The overall goal of a health system is the provision of efficient services that improve the health of the population in a way that is equitable and responsive, and which is financially fair and protects against social and financial risk.

To strengthen the health system, Sightsavers' support will recognise the dynamic interaction between the different blocks, therefore will ensure that when designing interventions to strengthen one part of the health system, the inter-connection and inter-dependence between them all the blocks will be taken into account. Sightsavers is committed to supporting rigorous situational assessments of the health systems in the countries where we are operational to be able to analyse what systemic weaknesses affect the provision of quality eye health and the strengths and opportunities that are available for eye health within the health systems.

Figure 2: **Inter-relation between service provision, health systems strengthening and development**



Vertical programming

Sightsavers' primary ambition is to integrate eye health within existing health systems and services rather than supporting 'vertical' programmes. However, vertical approaches are sometimes necessary and appropriate, particularly where there are specific interventions that are time-bound and demand a campaign style approach (e.g. a campaign to detect and operate on trichiasis cases). Therefore, vertically managed interventions will continue to be a part of our NTD programmes and for other conditions/ contexts where this is most appropriate and effective.

Responding to the development context

Sightsavers works in countries and societies with varying health system capacities and different development contexts. In countries where there is weak capacity within the health system, or where the system is in the early phases of developing eye health services, Sightsavers, out of necessity, will need to be more actively engaged in *supporting* the health system in order to initiate services and help governments target the un-met need. This is often the situation in countries emerging from conflict. As services and the development context improve, Sightsavers' work will gradually move towards a more systems strengthening approach to ensure sustainability.

3.4 Disability

Persons with disability constitute the world's largest minority group and are often among the most marginalised in the community. Universal eye health can only be achieved when persons with disability are able to gain equal access all eye health services and when the needs of persons with irreversible visual impairment are addressed within the health services.

Sightsavers will aim to make all of its health programmes fully accessible to and equitably inclusive of, people with disabilities. In addition, where relevant, Sightsavers health programmes will link to our social inclusion and education programmes to ensure comprehensive, multi-sector support for people with disabilities.

"Disability inclusion in Eye Health programmes" a publication led by CBM with the support of 12 other organisations, including Sightsavers, provides details of Sightsavers endorsed approach to disability in eye health.[16]

3.5 Theory of change

Sightsavers works with partners in a number of ways to support and demonstrate effective, high quality eye health projects and programmes through the provision of financial and technical support, research and evidence gathering, and

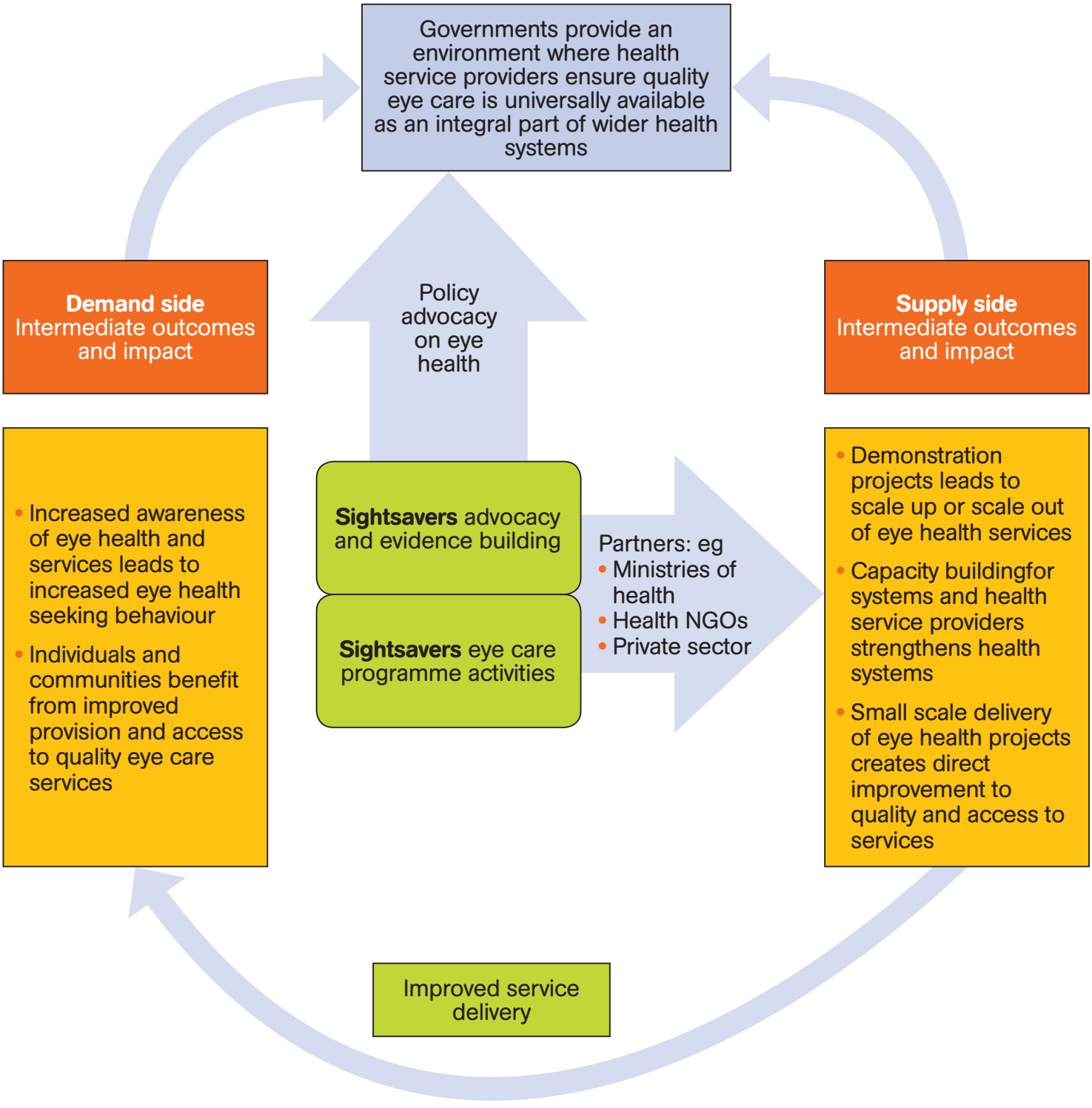
capacity building. In addition, Sightsavers works to influence policy through advocacy at local, national and international levels.

The outcomes of these activities can be viewed from two perspectives:

1. Provider's perspective: improved capacity of health service providers to supply quality and equitable eye care services from community through to tertiary level, as a result of a strengthened health system.
2. User's perspective: improved awareness changes in health seeking behaviour and greater demand for services among target communities, including demand for high quality, accessible and affordable services.

The diagram below (Figure 3) outlines Sightsavers' hypothesis for how we believe long term change and impact can occur through these two inter-dependent processes. Sightsavers and its partners bring direct and indirect benefits and results to target beneficiaries through demonstrating effective approaches and strengthening health systems. In doing so, Sightsavers aims to influence and contribute to longer term change and impact at the national government level in the countries where it works.

Figure 3: Theory of change



4 Quality Eye Health: where we will invest our resources

Quality eye health refers to preventive and curative health care related to diseases and conditions specifically affecting the eye, including trauma, infection and systemic conditions. It also includes the quality of non-clinical care and a patient's experience while accessing eye care, health promotion and the optical or functional rehabilitation of people with irreversible visual impairment and blindness.

4.1 Meeting the eye health needs of the population

Our organisational strategy commits us to working towards ensuring that the health system is capable of meeting the eye health needs of the population; this requires comprehensive eye care, from the community through to the tertiary levels.

Sightsavers will demonstrate in its work with partners the delivery of the range of services required, including: health promotion and self-help at the community level, increased case detection and early prevention through integration of primary eye health into primary health care (PHC), development of secondary level services and tertiary level networks and strengthening the 'return journey' to primary/community health and rehabilitation services. The emphasis will be on strengthening these regular primary level and facility-based care systems. The provision of eye health services through the outreach model is usually expensive and often unsustainable, therefore will be utilized as a short-term approach until permanent services can be established.

4.2 Integrating primary eye care into primary health care

Primary health care is the bedrock of any health system and Primary Eye Care (PEC), which includes eye health promotion, protection, prevention, treatment, referral and record keeping, needs to be firmly embedded within it.

The role of community health workers (CHW) in PEC rests primarily on health promotion but CHWs can also be trained to detect common eye conditions and to promote appropriate referral.

Sightsavers' support for the NTD programmes is rooted in the training of Community Directed Distributors (CDDs) for onchocerciasis control and trachoma. This approach forms the basis of Sightsavers' initiatives for the elimination of two of the neglected tropical diseases (NTDs). The support for training additional CDDs is required as we move from control to elimination programmes. CDDs are also often trained to carry out other health related activities such as assessing visual acuity and appropriate referral of those with visual impairment.

Sightsavers will continue to increase the number and effectiveness of community eye health workers through increased training, supported by standardised algorithms for assessment and treatment or referral.

There is a need for stronger evidence of what approaches are most effective for the delivery of primary eye health.

Sightsavers will conduct and support research to identify the most effective methods of delivering eye health care at the community and primary health facility level.

Facility-based PEC is often delivered by specially trained eye health workers. Given the scarcity of these health workers, particularly in Africa, the essential components of primary eye health needs to be integrated within PHC to ensure widespread coverage.

4.2.1 Strengthening the district eye health system

Sightsavers has traditionally supported the delivery of eye care through district level programmes. Demonstration at this level makes sense when working with governments, as this is administratively how health systems are structured, and therefore,

will be replicated and scaled up. In this next strategic period, Sightsavers will continue to focus on implementing cost-effective demonstration interventions at the district level. The design of these interventions will include measures to track and assess impact.

Given the emphasis in the next strategic period of developing stronger demonstration approaches, Sightsavers' global portfolio will contain a smaller number of demonstration programmes which will be implemented at the scale necessary to produce evidence for replication.

4.2.2 Human Resources for Eye Health in Africa (HReH)

A critical component of the health system is adequate human resources. The World Health Organization warned in 2006 of a shortfall of 4.3 million health workers, with the worst shortages in developing countries[17] and in particular, Sub-Saharan Africa.

Sightsavers will invest resources to support the global health initiatives for improving health worker numbers with the emphasis on human resources for eye health (HReH). Sightsavers' HReH strategic aim is to achieve a comprehensive, high quality and sustainable eye health workforce in Sightsavers-supported countries and more widely in the region. It aims to achieve the right number, the right quality, the right training and the right balance in the eye health workforce. A particular focus will be on Francophone and Lusophone Africa where HReH shortages are particularly severe.

Addressing the HReH crisis in Africa demands a coordinated response across national governments, international eye health agencies, education institutions, professional bodies and the Global Health Workforce Alliance (GHWA). IAPB-Africa is well positioned to coordinate the response and therefore Sightsavers has invested in strengthening the capacity of IAPB-Africa to coordinate and lead on the continental HReH agenda.

In each Sightsavers-supported country, we will work in partnership with Ministries of Health to develop national plans to strengthen HReH, wherever possible integrating them into existing plans for Human Resources for Health and health systems.

Where appropriate, Sightsavers will implement specific initiatives to address identified barriers or specific HReH challenges.

The full details of the HReH strategic initiative can be found in "Clear Vision: *10-Year Strategy to Respond to the Human Resources for Eye Health Crisis in Africa.*"

4.3 Fast Track Initiatives (FTIs) to eliminate blinding NTDs

Since its foundation, Sightsavers has been at the forefront of the global response to addressing what are now known as blinding neglected tropical diseases. Although initially focussed only on the blinding NTDs, onchocerciasis and trachoma, Sightsavers has increasingly adopted an integrated approach to addressing other NTDs through integrating treatments for other non-blinding NTDs in to its treatment distribution programmes. This serves as both a practical extension to our approach and an ethical imperative to use resources efficiently, effectively and systematically to meet the needs of the population.

In 2011, Sightsavers developed fast-track initiatives to eliminate onchocerciasis and trachoma. Within these initiatives, Sightsavers is committed to scaling up proven treatment and prevention approaches.

4.3.1 Eliminating onchocerciasis

In Africa, Sightsavers will continue to work towards the elimination of this blinding disease as a public health concern in partnership with the African Programme for Onchocerciasis Control (APOC) and the global coalition of actors committed to NTD elimination.

Over a 10-year period, Sightsavers aims to eliminate the transmission of onchocerciasis in Sightsavers-supported countries by 2015 for projects that fall within the WHO groups 1 – 3: Group 1: Elimination imminent (very likely) before 2012; Group 2: Elimination possible by phase II end of 2012; Group 3: Elimination feasible by end of 2015 and 2021 for projects under Group 4 Elimination not envisaged in the foreseeable future.

Full details can be found in the *Ten-year Strategic Fast Tracking Plan in Sightsavers-Supported Countries 2011 – 2021.*

4.3.2 Eliminating blinding trachoma

Trachoma is one of the leading causes of preventable blindness in the world. With 27.8 million cases of active trachoma and 3.8 million cases of trichiasis, Africa is most affected.1 Sightsavers has committed to fast tracking the elimination of blinding trachoma in 24 countries by 2020 as part of the Global Elimination of Trachoma programme (GET 2020). This will be achieved through supporting the full implementation of the WHO-endorsed SAFE strategy.

Full details can be found in Elimination of *Blinding Trachoma. Ten-year Strategic Fast Tracking Plan in 24 Countries – 2011 – 2020.*

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4.4 Ocular conditions

4.4.1 Cataract

During the next strategic period, Sightsavers will address the treatment of cataract by developing district level demonstration programmes that aim to improve the quality, quantity and access to cataract and allied services to the poorest and most under-served.

Sightsavers will work with partners to demonstrate that it is possible to improve the Cataract Surgical Rate (CSR) through:

Improving both the clinical and non-clinical quality aspects of services; evidence has shown that improving quality increases the demand for services.

- Strengthening community health programmes, including improving health promotion and case detection and increasing the number of community health workers trained in eye health.
- Increasing community awareness of improvements in the service quality to improve uptake of services.
- Improving the productivity of health workers and health services.
- Increasing the number of health workers available (toward Vision 2020 ratios).
- 'Task-shifting' to enhance the role of lower cadres of health workers and integrating PEC into PHC.

4.4.2 Refractive error

In this next period, we will strengthen our focus on uncorrected refractive error (URE) by working to develop, replicate, and scale-up innovative interventions to deliver quality, equitable, and cost-effective RE services in Asia and sub-Saharan Africa. We will do this by exploring different models to deliver RE services, including collaborations with the private sector. These models include, but are not limited to, vision centres. Pilots will be used to study and demonstrate different approaches. We will focus on creating sustainable solutions by addressing challenges related to both supply and demand of RE services, and will conduct operational research to support our work.

Improving the evidence base

Sightsavers will assess optical service delivery systems, including exploring innovative approaches, like working with the private sector to develop shared values, and investigate cost effective means to deliver quality RE services using different models. Operational research will be conducted to support continuous improvement in service delivery, and the learning will be captured and disseminated.

Integrating RE services into comprehensive eye care

Sightsavers will work to integrate RE services into comprehensive eye care as an essential component of community, secondary and tertiary levels services, by improving upon supply chain efficiency and by demonstrating value of these services to the targeted community.

4.4.3 Low vision

Our work in low vision will focus on demonstrating interventions that are integrated within a broader health, education and social inclusion approach. We will develop pilots within a few countries in Asia and sub-Saharan Africa which have well-developed eye health programmes to support our low vision work. Within these pilots, we will work with partners to integrate low vision rehabilitation into health, educational and social inclusion services and to increase the awareness among communities, health and education professionals, and governments.

Improving the evidence base

Within our demonstration programmes, we will work towards improving the evidence base on the cost-effectiveness and best practice of low vision interventions, and the impact on educational attainment and quality of life.

Increasing advocacy and awareness

Sightsavers will work with partners to advocate for the integration of low vision services into health, educational and social inclusion services and increase the awareness of low vision services among communities, health and education professionals, and governments.

4.4.4 Child eye health

Comprehensive services

Sightsavers will work to support and strengthen comprehensive eye health to include paediatric-oriented services for children and prioritise the leading causes of visual impairment in children. These include the management of RE, childhood cataract and, in certain countries, retinopathy of prematurity.

School eye health

We will work with partners to develop school eye health services that are integrated with school health programmes.

Sightsavers' health programmes will link with our education work and provide guidance on the necessary functional eye health assessments of children identified with low vision in order to achieve optimal visual rehabilitation for those children.

Refractive errors in children

Sightsavers will work to increase the awareness of RE as a cause of visual impairment in children and improve the case detection of children with visual impairment through the use of child eye health screening within integrated child health programmes. Sightsavers will continue to advocate that district RE programme sites are supported to deliver suitable spectacles for children as well as regular follow up to monitor visual development.

4.4.5 Diabetic retinopathy

Sightsavers will prioritise working in India and Pakistan to develop demonstration programmes for the prevention and treatment of Diabetic Retinopathy (DR). These will include the integration of public health promotion campaigns to raise awareness of diabetes and DR, community-based early case detection, and referral of sight-threatening DR to tertiary care services. Our interventions will be in collaboration with mainstream diabetes control and management of its multi-organ complications.

4.4.6 Glaucoma

Visual impairment from glaucoma is irreversible. The challenge in most African countries is that patients often present when they have lost vision and it is too late to make any significant impact. Sightsavers will work with partners in a one or two countries in Africa to implement and pilot public health strategies for the prevention and treatment of glaucoma.

5 Making the change

5.1 Developing a global portfolio

During the period 2013 - 2018, the development of Sightsavers' eye health programme will be guided not only by national level analysis, but also the need to ensure that the global portfolio reflects the ambition of this strategy and contributes to sector-wide learning. Therefore, during 2014, we undertook a critical review of Sightsavers' global eye health project portfolio to ensure that programmes are strategically aligned within a portfolio balanced regionally and thematically.

5.2 Strengthening alliances

Sightsavers is one part of the global effort to increase universal access to quality eye health care. We will identify and work in collaboration with global and regional partners whose organisational philosophy and geographical reach are complementary to ours and will facilitate the achievement of our strategic priorities. In prioritising working with national governments and within existing systems, we endorse the principles of aid effectiveness as enshrined in Paris Declaration and Accra Agenda for Action[18] and will ensure that our way of working reflects this endorsement.

Our work in eye health includes collaboration and partnerships with international organisations such as the WHO AFRO, IAPB, the World Bank and the Global Health Workforce Alliance. We also work with regional organisations such as WAHO and SADEC in Africa. We also collaborate with professional organisations such as WACS, EACO, ICO, WCO and WCO in human resources for eye health. For NTDs we will continue to work with the Global alliance for the Elimination of Trachoma, GET 2020, ICTC and the NGDO Coordination Group for Onchocerciasis Elimination as well as key players in the WATSAN sector in countries where we work.

5.3 Measuring quality

It is essential that Sightsavers ensures the best possible eye health outcomes and experience of service to beneficiaries. Sightsavers' quality assessment system is utlised to identify programme weaknesses and strengths and contributes to our evidence base. This assessment is undertaken using Sightsavers' comprehensive minimum quality standards.

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Where the expectations of these standards have not been met, Sightsavers works collaboratively to identify the appropriate actions that must be taken to improve performance. All of Sightsavers' partners will be assessed on a cyclical basis in relevant technical areas to ensure the implementation of identified follow-up and remedial actions, as well as continuous quality improvement.

In order to ensure the safeguard of patients in a surgical setting, Sightsavers will work with its partners to ensure that clinical practice is carried out within a framework of minimum quality standards which included monitoring of outcomes.

We will also institute procedures and checks to ensure collected data at all levels accurately reflects the number of actual products or services delivered. A routine assessment methodology that integrates capacity assessment and data trace and verification will be employed with project partners.

5.4 Developing the evidence base

High quality research is critical for Sightsavers' evidence-based practice. Sightsavers will continue and build upon its commitment to research and the development of appropriate technologies and approaches. Particularly significant examples of research include: the Nigeria and the Pakistan National Blindness and Low Vision surveys, and Sightsavers' support to researchers for the development of the Rapid Assessment of Avoidable Blindness (RAAB) methodology which has greatly improved availability of epidemiological data.

Sightsavers will seek to conduct research to:

- Assess the epidemiological and systemic contexts within which Sightsavers operates.
- Evaluate the effectiveness and cost-effectiveness of specific interventions.
- Compare alternative interventions to deliver eye care services.
- Understand the nature and scale of the operational challenges facing eye health systems and the most appropriate ways to address them.

Research findings will feed into further improvement of Sightsavers' demonstration models of eye care services to increase their impact and suitability for replication. By gathering evidence of 'what works' and by testing different interventions, Sightsavers will assess which models are relevant, in which circumstances and for whom.

Furthermore, the research which Sightsavers supports will contribute not only to its own body of knowledge and expertise, but also enable Sightsavers to use it for positive, longer term change, for example to influence policy makers to introduce scalable, cost effective and sustainable models of eye care. In doing this it is hoped that Sightsavers will be recognised as an informed, effective resource for eye health policy makers, the private sector, health professional bodies, the academic community, civil society, donors and national governments.

5.5 Policy and Advocacy

The use of evidence-based advocacy will be critical to the successful delivery of this Strategy. Sightsavers' advocacy will focus on putting eye health onto the health policy agenda through increasing awareness of the need for, and benefits of, good eye health. Informed by research findings, programme evidence and policy analysis, Sightsavers will build advocacy capacity and engage in advocacy initiatives at all levels - global, regional, national, district and community – as appropriate and relevant.

At global level Sightsavers will advocate for member states of the WHO to engage with the implementation of the WHO Action Plan – *Universal Access To Eye Health: A Global Action Plan 2014-2019* – the goal of which is to reduce avoidable blindness and visual impairment as a global public health problem and secure access to services for visually impaired people. Sightsavers will also seek to engage in and influence health and development policy debates that critically impact on the delivery of eye health services and functioning of health systems, such as universal health coverage, human resources for health, health financing and the critical importance of national HMIS.

At all levels Sightsavers aims to demonstrate cost-effective approaches to provide safe, affordable and quality eye health services, which in turn can be replicated and scaled-up at district and national level. Advocacy is central to achieving this aim. Sightsavers will provide clear evidence of *what works* and use this evidence to influence district

and national health policy and practice, and improve health outcomes. Working with partners and through strong strategic alliances and networks, Sightsavers will advocate for national governments to take ownership for ensuring the provision of good quality eye health to all those who need it as an integral part of the national health system. At the community level, Sightsavers will seek to raise awareness to stimulate demand for quality, accessible and affordable health services.

Sightsavers will also advocate strengthening the quality and accessibility of Sightsavers-supported programmes and advocate at all levels for the inclusion and participation of marginalised groups, including people with disabilities, in eye health, health and development decision-making.

5.6 Monitoring the strategy

Sightsavers' value statement declares that 'learning and innovation are essential in order to improve the quality of what we do' and that 'we underpin our work with the best available evidence and research.' Therefore, gathering, appraisal and use of evidence is critical for the successful implementation of Sightsavers' eye health strategy.

In order to deliver on this strategy, Sightsavers will ensure that its eye health programmes are evidence-based and that pilot and demonstration approaches and programmes generate sufficient new knowledge for internal and external dissemination and learning.

The goal of this strategy is for 'governments to ensure good quality eye health is universally available to all people as an integral part of wider health systems.' Indicators and metrics for measuring this top line goal are specified in the organisational Strategy Implementation Monitoring (SIM) Card. The specific aim of this strategy is to demonstrate scalable, adaptable and cost-effective interventions to eye health which support and strengthen the health systems by 2018. To help achieve this, Sightsavers has specifically developed indicators of success for demonstration approaches within the wider monitoring and evaluation (M&E) framework. These indicators help provide the necessary evidence that will show Sightsavers' demonstration projects are suitable and appropriate for scale up.

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Annex 1 The policy context in which we work

This section summarises the policy environment within which this Strategy will be delivered and which may contribute to or impact on its successful achievement.

This Strategy comes at an important time for eye health and health. It sits at the cross roads between the current Millennium Development Goals (MDGs) agreed in 2000 and a new development framework from 2015 offering new opportunities and challenges in health. In many low and middle income countries, the MDGs have led to substantial progress in improving people's health. However, it is widely recognised that such gains have been unequal between and within countries and that the MDGs have failed to reach the most vulnerable. Critically, neither disability nor eye health were addressed by any of the eight MDG goals and associated targets and indicators. (16)

The new development framework, post 2015, offers an opportunity to address systemic issues not addressed by the MDGs such as health systems strengthening and improve progress towards the realisation of the Right to Health and universal health coverage (where everyone in a society can get the health care they need without having to incur financial hardship) – all of which are critical pathways to addressing inequities. Underpinning this, the post 2015 development framework must take account of the underlying social determinants of health and ensure the inclusion of disabled people in decisions about their eye health, health and development.

In eye health, the global policy framework is framed, in large part, by the WHO's second action plan on blindness and visual impairment and Vision 2020. *Universal Access to Eye Health: A Global Action Plan 2014–2019* aims to reduce avoidable visual impairment as a global public health problem and secure greater access to services. The action plan is a critical tool that will enable governments to integrate eye health into their wider health and development agendas and ensuring the implementation and monitoring of the action plan at national level is a key area of advocacy for Sightsavers. Vision 2020: The Right to Sight, a joint programme of the WHO and IAPB seeks to ensure the best possible vision for all people and improve quality of life, through the establishment of a sustainable, comprehensive eye care system as an integral part of every national health system.

Together both the action plan and Vision 2020 underpin international action on eye health.

At global level the health of disabled people is promoted and protected through the UN Convention on the Rights of Persons with Disabilities (UNCRPD) introduced in 2008. The UNCRPD requires governments to provide equal access to health care and related services for people with disabilities and is the first legally binding international instrument to specifically protect the rights of more than 650 million people with disabilities worldwide. (19) Crucially, the UNCRPD requires states to provide equal access to health care and related services for people with disabilities, including visually impaired and blind people. The challenge is that while many countries have ratified the UNCRPD, in practice, in resource constrained environments, the UNCRPD has, until now, had insufficient practical application. Sightsavers' role is to support governments to implement the UNCRPD through national legislation, regulation and strategies and empower disabled people's organisations to hold their governments to account.

Underpinning these global health and development frameworks are international commitments to promote aid effectiveness such as those made in Paris, Accra and Busan respectively. Effective development cooperation is about securing better results through working together. Achieving this means working in different ways to improve cooperation and in supporting government leadership to ensure that the poor benefit from effective health services. Strong civil society engagement is critical in delivering effective development cooperation and Sightsavers' current and continued engagement in mechanisms such as the International Health Partnership (IHP+) is critical to achieving better results.

Annex 2 Sightsavers – a brief history and key milestones

1950 Sir John Wilson, himself blind, set up an international organisation to help people in the world's poorest countries see again. In its first year, the organisation (then known as the British Empire Society for the Blind) formed national organisations for blind people in 6 countries, initially concentrating on 'education, rehabilitation and welfare.'

Sightsavers

1953 A number of surveys were conducted in West Africa to determine the extent of the various eye conditions. These proved that 80% of blindness was either preventable or curable. Along with trachoma, onchocerciasis was identified as a major cause of blindness in West Africa.

1955 Several pioneer schemes in rural training were set up with the aim of integrating blind people into their communities by teaching them useful skills such as crop cultivation, fishing, herding and rural crafts. Sir John observed that 'in economic terms the cost of blindness is astonishing. Investing in training schemes is crucial in relieving this financial strain and allowing blind people to become independent and self-sufficient.' The following year, the first eye clinics were set up in Nigeria.

1957 The changing political attitude towards Britain's overseas territories resulted in a change of name and the name of the organisation was changed to the Commonwealth Society for the Blind. Royal status (RCSB) was conferred by the Queen a year later.

1960 The first mobile eye units appeared in Kenya and Uganda.

1962 World Health Day adopted 'Prevention of Blindness' as its theme, an idea proposed by RCSB.

1964 The very first eye camp was held at Spencer Eye Hospital in Karachi, Pakistan, expanding Sightsavers' work into Asia. Sir John recognised the potential of these camps to deliver the world's largest sight restoring programme.

1966 Eye camps were also held in India providing vital cataract surgery – 10,000 sight restoring operations were performed.

In the late 1960's an experiment was launched in Katsina, Nigeria to determine whether blind children could be educated in local schools with the assistance of itinerant teachers. The scheme proved highly successful and was the forerunner of Sightsavers' Integrated (later to become Inclusive) Education Programme.

1970 The 'Eyes of India' campaign was launched, supporting 200 eye camps in 9 Indian states. Over 21,000 operations were performed, at a cost of £2 each, along with over 6,500 preventative operations.

1971 According to Sir John, the organisation boasted the 'largest sight-saving programme of any non-governmental agency in the world'. The Annual Report records 161 projects in 32 countries.

1974 The Onchocerciasis Control Programme began a spraying strategy in West Africa with the aim of controlling the black Simulium fly. However, vast infected areas made spraying very expensive and the use of insecticides had the potential to harm natural eco-systems and agricultural economies. The organisation also played a key role in establishing IAPB to coordinate the global fight against blindness.

1977 The first permanent base hospitals were established in India to provide low cost mass treatment.

1979 Local training was recognised as key to Sightsavers' success and eye surgery courses for eye specialists and medical auxiliaries were implemented in Bangladesh.

1980 More emphasis was put onto local training, which is vital for long-term eye care. In Malawi a training course for ophthalmic assistants was set up, and this now serves much of central and southern Africa.

1981 In her Christmas Broadcast, the Queen highlighted two major milestones: Sightsavers' 10 millionth treatment to save sight and Sightsavers' 1 millionth treatment to restore sight.

1984 A gas leak in Bhopal, India, killed 200,000 and temporarily blinded many more. RCSB was the first relief to arrive and a UK disaster appeal was launched to fund the construction of a new eye hospital to treat the injured.

1987 Blue Peter launched its 'Sight Savers' appeal, raising over £2 million or eye care across Africa and RCSB subsequently adopted the title Sightsavers.

Merck released Mectizan®, trade name for Ivermectin, a drug which killed the infective and blindness causing stage of the worms that cause onchocerciasis. Sightsavers could now begin a preventative distribution programme.

1994 Around this time Sightsavers was instrumental in the development of the Comprehensive Eye Services (CES) model, incorporating screening, treatment, surgery, education and training through to rehabilitation services. The model was designed to be replicated in new regions and countries. Sightsavers also set up training courses in new surgical techniques and supported the manufacture of replacement intraocular lenses in India.

1999 By the end of the year over 5 million people were protected against onchocerciasis through the Mectizan Distribution Programme.

2000 In Sightsavers' 50th year, a cataract campaign restored sight to over 400,000 people. The year also saw the launch of Vision 2020, a joint initiative with the WHO and 19 international eye care organisations, including Sightsavers. The aim is to eliminate avoidable blindness by 2020. Sightsavers also participated in the first 'World Sight Day', now held annually in October.

2002 Under the Health for Peace Initiative (HFPI) four West African governments come together and take a cross-border approach to tackling health problems.

2004 Vision 2020 identifies childhood blindness as one of five global priorities. Sightsavers launched the Bangladesh Childhood Cataract Campaign, with the aim of restoring sight to at least 90% of children in Bangladesh who have cataract.

2009 Sightsavers launches a new strategy which changes the way it works in order to bring about long-term change. Whilst Sightsavers continue to

support its partners, Sightsavers will also increase efforts to influence governments. Sightsavers' projects will act as demonstration approaches which show best practice, coupled with advocacy efforts to influence governments to replicate these approaches further.

2010 Sightsavers supports its 150 millionth Mectizan® treatment against onchocerciasis. For the first time it is feasible to talk of elimination rather than control of the disease – a fitting way to celebrate Sightsavers' 60th anniversary.

2011 The NTDs attract major international interest in 2011, with Sightsavers playing a leading role in this area.

2012 Sightsavers leads a consortium in the DFID-funded Global Trachoma Mapping Project. This will complete the map of where trachoma is endemic and form the basis for a fully global elimination programme.

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Annex 3 Eye health glossary

Accommodation	Increase in optical power by the eye in order to maintain a clear image (focus) as objects are moved closer. Occurs through a process of muscle contraction in the eye that causes the pliant crystalline lens to "round up" and increase its optical power and focus on nearer objects. Natural loss of accommodation with increasing age is called presbyopia.
Age-related macular degeneration (AMD, ARMD)	Group of conditions that include deterioration of the macula, resulting in loss of sharp central vision. Two general types: "dry," which is more common, and "wet," in which abnormal new blood vessels grow under the retina and leak fluid and blood (neovascularization), further disturbing macular function.
Amblyopia "lazy eye"	Decreased vision in one or both eyes without detectable anatomic damage in the eye or visual pathways. Usually not correctable by eyeglasses or treatment.
Blindness	Having visual acuity that, in both eyes, cannot be corrected to 3/60 or better on the Snellen chart or the equivalent on any other standard visual acuity measurement system. Legally, blindness also includes persons with 3/60 or better but with a visual field of less than 20 degrees from point of fixation of sight. Related terms Irreversible blindness refers to blindness from a cause that cannot be reversed by any known method or treatment. E.g. blindness from glaucoma. Preventable blindness refers to blindness from a cause that is not reversible when the person is blind, but with proper treatment or preventive methods, a person with the disease need not go blind. E.g. blindness from trachoma. Avoidable blindness is a term often used to describe any form of blindness that could have been prevented, or if not preventable can be cured with an available treatment. This includes preventable blindness. E.g. cataract., trachoma.
Cataract	Opacity or cloudiness of the crystalline lens, which may prevent a clear image from forming on the retina. Surgical removal of the lens may be necessary if visual loss becomes significant.
Conjunctiva	A thin layer of tissue that lines the inside of the eyelids as well as the outer surfaces of the sclera.
Cornea	The transparent outer front part of the eye that covers the iris, pupil, and anterior chamber and provides most of the optical (refractive) power of the eye.
Crystalline lens	The eye's natural lens. Transparent, biconvex intraocular tissue that helps bring rays of light to a focus on the retina. When this structure loses transparency and becomes opaque, it is known as a cataract.

Diabetic retinopathy	Spectrum of retinal changes accompanying long-standing diabetes mellitus. Early stage is background retinopathy. May advance to proliferative retinopathy, which includes the growth of abnormal new blood vessels (neovascularization) and fibrous tissue.
Ecology	The science of the relationships between organisms and their environments.
Glaucoma	Group of diseases characterised by damage to the optic nerve and retinal nerve fibres and usually with increased intraocular pressure.
Intraocular	Of or related to the inside of the eye.
Infrastructure	The basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communications systems, water and power lines, and public institutions.
Low vision	A person with low vision is one who has impairment of visual functioning even after treatment and/or standard refractive correction, and has a visual acuity of less than 6/18 to light perception, or a visual field less than 10 degrees from the point of fixation, but who uses, or is potentially able to use, vision for the planning and/or execution of a task for which vision is essential.
Ocular	“Of” or “relating” or “referring” to the eye.
Ocular morbidity	Any disease or condition which causes problems or discomfort to the eye (s) and may cause a person to require treatment or seek medical advice.
Optic nerve	The nerve that connects the eye to the brain. The optic nerve carries impulses of light from the retina to the brain, which then interprets the impulses as images.
Presbyopia	Condition in which the aging crystalline lens (at around age 40) becomes less able to change shape to focus light at all distances, especially near vision. Presbyopia can be corrected with reading glasses, bi-focal glasses, or progressive lenses. Additional symptoms include eyestrain, headaches, and squinting.
Pupil	The opening in the center of the iris that changes size to control how much light is entering the eye.
Refraction	Test to determine an eye’s refractive error and the best corrective lenses to be prescribed.
Refractive error	A condition in which light bends incorrectly, causing an image to be out of focus.

Retina	The light sensitive rear two-thirds of the eye that converts images from the eye's optical system into electrical impulses that are transferred by the optic nerve to the brain.
Retinopathy of prematurity	A disease of the immature retina of preterm babies characterised by proliferation of disorganised blood vessels leading to fibrous tissue formation, scarring of the retina and retinal detachment. It is caused by intensive oxygen therapy in neonatal and has several stages, with earlier stages possible to treat and irreversible blindness from stage 5.
Snellen Chart	The common eye chart with letters or numbers that have been carefully calibrated to a set standard and used to measure visual acuity in eye examinations.
Visual Acuity	Measurement of how well a person sees; the eye's ability to and distinguish object details and shape – normally expressed as a fraction. E.g., 6/6 Visual acuity test results are classified into 4 groups Normal vision – 6/18 or better Visual impairment – less than 6/18 to 6/60 Severe visual impairment – less than 6/60 to 3/60 Blind – less than 3/60
Visual field	The entire range in which an eye can see, simultaneously, including peripheral vision.
Visual impairment	A term referring to any person with a visual acuity of less than 6/18 or its equivalent in a standard measuring system.

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