DRAFT ACTION PLAN FOR THE PREVENTION OF AVOIDABLE BLINDNESS AND VISUAL IMPAIRMENT

INTRODUCTION

1. According to WHO estimates, there are approximately 314 million people worldwide living with visual impairment due either to eye diseases or uncorrected refractive errors. Of this number, 45 million people are blind, and 90% of them live in low-income countries. The major causes of blindness are cataract (39%), uncorrected refractive errors (18%), glaucoma (10%), age-related macular degeneration (7%), diabetic retinopathy (4%), trachoma (3%), eye conditions in children (3%), and onchocerciasis (0.7%). It was estimated that currently up to 80% of all visual impairment in the world could have been avoided.

In response to this situation, highly cost-effective interventions have been developed for most of the major causes of avoidable blindness, which led to the establishment of major international partnerships and alliances such as the African Programme for Onchocerciasis Control (APOC), the Onchocerciasis Elimination Programme in the Americas (OEPA), the WHO Alliance for the Global Elimination of Blinding Trachoma (GET 2000) and "VISION 2020 - the Right to Sight". More recently, two WHA resolutions (56.26 and 59.25) called for the Elimination of avoidable blindness and visual impairment, mainly through the establishment of national plans and programmes. However, despite significant progress, there are still many countries and communities where the prevalence of avoidable blindness is unacceptably high.

PURPOSE

2. The plan aims to intensify and coordinate efforts made by Member States, WHO Secretariat and International Partners in the field of prevention of blindness and visual impairment. It also strives to develop comprehensive eye health systems at national and sub-national level rather than disease specific activities.

3. With a main focus on low- and middle-income countries, the plan is intended to:
   - Systematically collect, analyse and disseminate information on the current causes, magnitude trends and geographical distribution of blindness and visual impairment.
   - Determine the role of social, economic, behavioural and political determinants of eye health;
   - Facilitate the development of evidence-based norms, standards and guidelines for cost-effective interventions;
   - Identify, document and share good practices in implementing prevention of blindness and visual impairment interventions and eye health systems;
• Enable overall experience exchange and information sharing on the progress in prevention of blindness and visual impairment activities at global, regional and national levels.

SCOPE

4. This plan focuses on the major causes of avoidable blindness and severe and moderate visual impairment as defined in the proposed revision of the International Classification of Diseases. As mentioned earlier, these major causes together represent an estimated 80% of global blindness and visual impairment. The plan does not address categories of milder visual impairment. It also does not directly address the eye conditions in which prevention and/or treatment is currently not sufficiently known. In these cases rehabilitation services based on principles of social inclusion and participation are required. It is also recognized that the actual magnitude of blindness and visual impairment is likely to be higher as the epidemiological information on some causes (e.g., presbyopia) is not yet fully available.

5. Because blinding conditions are of a chronic nature and mostly due to noncommunicable causes, this plan complements the Action plan for the global strategy for the prevention and control of noncommunicable disease adopted by the 61st WHA. However, as most of the blinding conditions do not share the risk factors other than tobacco use addressed in the NCD plan, prevention strategies differ significantly. Similarly, although primary health care and community-based interventions are essential for prevention of blindness and visual impairment, specific skills, technology and infrastructure are required for the provision of quality eye care services.

6. According to the latest evidence, the share of communicable eye conditions (e.g. trachoma and onchocerciasis) in the global magnitude of avoidable blindness is decreasing, while the noncommunicable age-related eye conditions are on the increase (e.g. cataract, glaucoma, diabetic retinopathy, etc.). A coordinated intersectoral approach is required to tackle both communicable and noncommunicable conditions, including better integration within the existing global health and development initiatives.

RELATION TO EXISTING STRATEGIES AND PLANS

7. Prevention of avoidable blindness and visual impairment was repeatedly discussed by the World Health Assembly and addressed by several resolutions. A number of global international partnerships and alliances were prompted by WHO to address avoidable blindness: the WHO Onchocerciasis Control programme (successfully completed in 2002), the African Programme for Onchocerciasis Control (APOC), the Onchocerciasis Elimination Programme in the Americas (OEPA), the WHO Alliance for

1 “Blindness” is defined as a presenting visual acuity of less than 3/60, or a corresponding visual field loss to less than 10°, in the better eye with the available correction. “Severe visual impairment” is defined as presenting visual acuity of < 6/60 to 3/60 and “Moderate visual impairment” is defined as presenting visual acuity of < 6/18 to 6/60. In this document “Visual impairment” includes both severe and moderate visual impairment.

2 Resolutions WHA 22.29, WHA 25.55, WHA 28.54, WHA 51.11, WHA 56.26 on Elimination of avoidable blindness and 59.25 on Prevention of avoidable blindness and visual impairment.
the Global Elimination of Blinding Trachoma (GET 2000) and finally the "VISION 2020: the Right to Sight" the Global Initiative for the Elimination of Avoidable Blindness by 2020, a partnership between the WHO and the International Agency for the Prevention of Blindness, an umbrella organization with 97 member organizations.

8. This action plan aims to support the implementation of the WHO Eleventh General Programme of Work and the Medium-term Strategic Plan 2008-2013, particularly Strategic Objective 3, which provides details of expected results, targets and indicators for the Organization's work on prevention and control of avoidable blindness and visual impairment. It also supports the implementation of the existing regional resolutions and plans.

RESOURCES
9. The Programme Budget 2008-2009 describes the financial resources required by the Secretariat for the current biennium in respect of work undertaken to meet Strategic Objective 3. For future biennia, additional resources will be required, and allocation and mobilization of resources will be re-examined. Further progress in implementation of prevention of avoidable blindness and visual impairment at global, regional and national levels will depend on the amount of additional resources available. This will require all partners – including intergovernmental and nongovernmental organizations, academic and research institutions and the private sector – to play a stronger role in resource mobilization at all levels.

TIME FRAME
10. This action plan is designed to cover the same period as the Medium-term Strategic Plan 2008-2013.

SITUATION ANALYSIS

1. Determining the magnitude, causes and impact of blindness and visual impairment

During recent years, there was a major development in availability of data on the causes and magnitude of blindness and visual impairment around the world. In the past, the surveys on causes of visual impairment and blindness varied in the methodology and definitions used. However, after many of the newly conducted surveys followed WHO definitions, the reported data in various countries became increasingly comparable and the regional and global epidemiological data on visual health more feasible to compile. To substitute large population-based studies, which are costly and time-consuming, WHO introduced standardized simplified methodologies for obtaining epidemiological data on causes of blindness and visual impairment (e.g. Rapid assessment of cataract surgical services, rapid assessment of avoidable blindness, and childhood blindness protocol) which facilitated the collection of information and data from …countries. Determining the causes and magnitude of blindness in the world enables global and regional priorities to be set up, development of targeted strategies and establishment of large international
prevention of blindness alliances. The remaining lack of epidemiological studies in a number of countries, however, prevents more precise intervention planning, monitoring and evaluation. In addition, missing country and district epidemiological data on the status of visual health in the population limits further analysis of the trends in the pattern of visual impairment, and timely development of appropriate public health interventions. There is an urgent need for more epidemiological data, as well as adequate modelling approaches to determine trends, so that the planning of efforts to prevent avoidable blindness and visual impairment can be maintained and strengthened as appropriate. Additionally, an improved mechanism for systematically collecting standardized information on human resources, infrastructure and available technologies, and the overall readiness of countries to address the needs is necessary.

2. Collaboration of country health care authorities with WHO country, regional and headquarters offices

It has been regularly observed that general health care providers and policy makers may not be fully aware of all currently available eye care interventions, their cost effectiveness and the potential to address the 80% of global blindness which is avoidable. Further it has been observed that coordinated provision of information on the current strategies and agenda of the elimination of avoidable blindness to country health care authorities and WHO country offices facilitates appropriate interventions and approaches to preserve visual health in the population. A number of documents and information sources have been developed, circulated by mail and also made available at the WHO Prevention of blindness website. The Country Cooperation Strategy documents reflect the agreed joint agenda between the ministry of health and the respective WHO country office. It is believed that the lack of available resources for prevention of blindness at WHO country offices hinders progress. So far there has been limited progress in including the prevention of blindness strategy in such documents, despite the six resolutions addressing the prevention of avoidable blindness and visual impairment, major long-standing WHO international partnerships addressing prevention of blindness, as well as major successes in reducing avoidable blindness, such the WHO Onchocerciasis Control Programme (successfully completed in 2002), a landmark in the history of combating river blindness in 11 African countries. At this stage the potential for preventing and curing avoidable blindness and visual impairment has not been fully recognized. With regards to the regional coordination of prevention of visual loss, there are major human resource shortages with regional advisors in only three of the WHO Regional offices (AFRO, EMRO and AMRO).

3. National prevention of blindness committees

Considerable attention was paid to the establishing of active national prevention of blindness committees and national programmes which are believed to be critical in maintaining the momentum of the prevention of avoidable blindness and visual impairment. Their role is to liaise with all key domestic and international partners to share information and coordinate activities. To date, 118 Member States have reported the establishment of a national committee. It is believed that the existence of a national committee for the prevention of blindness is a prerequisite for the development of the national prevention of blindness plan and its implementation, monitoring and periodic assessment. Although there are reports justifying this approach, in some countries the
committees, have not demonstrated sufficient proactiveness. In some cases, the selected individuals, often dedicated eye care professionals, are relied on to serve as the driving force for the prevention of blindness agenda. Although the recommendations do exist, the committee membership is not uniform, ranging from the ideal scenario of having all key partners represented (including the country health care authorities and the country WHO office representative), to a small group of dedicated eye care professionals. Reporting mechanisms must be set up to monitor the composition and functionality of the committees.

4. National prevention of blindness plans

There is evidence that low- and middle-income countries with a well-developed comprehensive national prevention of blindness plan, with clearly specified time-linked targets and indicators, have substantially improved the provision of eye health care services. In countries in which socioeconomic growth was slow, it has been observed that a well-managed implementation of the plan has been instrumental for the development of eye care services. Proper allocation of resources to cost-effective eye care interventions accelerates the development of eye care services, allowing them to develop beyond the standard which would be otherwise determined exclusively by the country's gradual socioeconomic growth. While the development of national prevention of blindness plans was reported from most low- and middle-income countries (to date 104 Member States reported having a plan), there is insufficient evidence on their implementation and their actual impact. Some national plans lack the inclusion of measurable targets, the timeline for implementation, and adequate tools for monitoring and evaluation. In some countries, the plans are only partially implemented, having the existing resources and interest targeting certain selected eye conditions rather than promoting implementation of the national prevention of blindness plans in order to build comprehensive eye care systems. In addition, due to lack of resources, the progress is often slow or fragmented, the national prevention of blindness plans do not translate into tangible improvements in eye care service provision, and in some countries the initial thrust for prevention of blindness is diminishing. It is essential to ensure that the implementation phase of national plans is adequately managed and benefit from the active support of national prevention of blindness committees. A standardized approach to monitoring and evaluating the implementation and subsequent impact of national and district plans, and an adequate global reporting system which would allow for the qualitative monitoring, have not been fully developed.

5. WHO strategies for prevention of blindness and visual impairment and provision of technical assistance

Over the past decade, there has been major progress in developing and implementing WHO strategies for the control of communicable causes of blindness and visual impairment. The observed successes in the control of diseases such as onchocerciasis, trachoma and xerophthalmia benefited from an implementation of the WHO recommended strategies (e.g. SAFE strategy for trachoma control), and their adoption by Members States and all key international partners. This unified approach facilitated preventive efforts aimed at millions of individuals at risk of visual loss, and convinced major donors that long-term commitment is required. Furthermore, coordinated provision of technical assistance to Members States to assess the causes and magnitude of blindness
and visual impairment, identify the needs in provision of eye care services and to facilitate the development, implementation and monitoring of national prevention of blindness plans contributed to major accomplishments in the global agenda of preservation of visual health. To date, 150 Member States have held country and district prevention of blindness/VISION 2020 workshops, which became a major platform for provision of knowledge on community eye health, and for facilitating the process of need analyses followed by the national and district prevention of blindness plan development. Their impact in terms of health outcomes, however, requires further analysis and assessment.

Major shifts in the pattern of causes of blindness are now documented, the communicable causes are diminishing while age-related chronic eye conditions are rapidly growing. While public health interventions for some of these eye conditions have been systematically reviewed and respective WHO recommendations developed (e.g. for cataract and diabetic retinopathy), other eye conditions such as glaucoma, age-related macular degeneration, and retinopathy of prematurity, remain to be addressed. The latter are the new major emerging challenges for the blindness control agenda. The reasons are multiple, ranging from the lack of scientific knowledge to support cost-effective public health interventions, to limitations in early detection and the cost and/or complexity of available treatment. Further research into these areas needs to be encouraged.

6. Recognition of prevention of avoidable blindness and visual impairment as a global health issue

Sound scientific epidemiological information and availability of cost-effective tested interventions for the control of most of the major causes of avoidable blindness increased the awareness of Member States of the need to strengthen their efforts try to preserve visual health in their populations. In recent years, the agenda of avoidable blindness and visual impairment was raised twice during the World Health Assembly, resulting in two resolutions, adopted in 2003 and 2006. The resolutions unified the approach to prevention of blindness activities, requesting establishment of national committees, specifically in low- and middle-income countries in which a committee had not previously been established, development of national prevention of blindness plans, and urged for their implementation with strong monitoring and evaluation components. It has been observed that in some countries the actual impact of WHA resolutions on allocation of new resources for development and implementation of national and district prevention of blindness plans has not met the initial expectations. In most countries action is slow and the progress in implementing adequate prevention of blindness activities is limited. While there is an active prevention of blindness agenda at global level and mostly also at regional levels, some countries have yet to utilize the international experience and scientific evidence to develop and implement their own prevention of blindness measures. The visual health agenda and its impact on poverty alleviation has not been adequately integrated in the development agenda. In addition, the advocacy efforts for prevention of visual loss are followed by a rather small audience, composed mostly of public health eye care professionals.

7. International partnerships

Over the last decade, major international partnerships were created to support WHO to assist Member States in their efforts to prevent blindness. The partnerships demonstrated
substantial achievements, mostly in combating infectious causes of blindness. The partnerships also encouraged and supported long-term resource mobilization, including donation programmes (e.g. the Merck donation programme for ivermectin to control onchocerciasis; and distribution of azitromycin under a donation programme by Pfizer to control eye inflammation in trachoma). Global partnerships have united and substantially strengthened the key international stakeholders in their approach to prevention of blindness interventions, using evidence based WHO disease control strategies. Despite some notable improvement in data collection of blindness prevention activities at country and district levels, consolidated reporting of these remains limited, in part due to the weak monitoring systems in many countries, but also in respect of the limited information sharing and exchange between countries and their international partners.

8. Infrastructure and human resource development

In many low-income countries, substantial achievements were accomplished by introducing and strengthening primary eye care services by providing a link between the community and the formal health care system (e.g. secondary and tertiary eye care centres). Although the recent technological development in eye care allowed for advanced methods of diagnostics and treatment, new financial requirements for adequately equipping a secondary and/or tertiary eye care center jeopardize their growth.

Many professional membership organizations, partners of WHO for the prevention of blindness, substantially developed the collaboration of academic training institutions in high-income countries with low-income countries, assisting in coordinated human resource development. Models were developed and tested for eye care training institutions in low-income countries, human resource retaining measures applied, and adequate ways of financing determined. Additionally, advanced curricula on community eye care were developed in academic centers and hundreds of graduates now assist in many low-income countries in the promoting of prevention of avoidable blindness and visual impairment activities. However, a critical shortage of eye care personnel persists in many low-income countries. In many of these cases, the existing human resources are centered around larger urban agglomerations often leaving the rural areas with a non-existent service. Additionally, well trained personnel tend to leave low-paid positions in many of the public and university health care establishments seeking new positions in private health care sector or even leaving the country for work opportunities abroad. Therefore, the poorest areas of low-income countries are predominantly affected by a suboptimal workforce, limited by shortages, low productivity and maldistribution.

9. Resource mobilization

Strong international partnerships are anticipated to be instrumental in convincing a number of international and domestic donors to support prevention of blindness activities mainly at country level, however, to date it has been noted that there have been major failures to generate sufficient resources. Despite the evidence-based and integrated strategies supported by major global partnerships for prevention of blindness, the potential for generating additional resources from international and domestic donors has not been fully explored. There is still insufficient awareness of the savings related to blindness and visual impairment expenditure, that could be made by preventing them in the first place.
10. Integration of visual health into broad development agendas

Integration of eye health in larger and intersectoral development plans helps to build integrated comprehensive health services and allows for resource and infrastructure sharing. Only some low-income countries have managed to integrate primary eye care as a solid part of primary health care, addressing a major share of the existing unmet needs of avoidable blindness. An added value was recorded in countries in which prevention of blindness was integrated into the broader health intervention and/or socio-economic development programmes. Despite the reports for direct links between visual impairment and decreased socioeconomic opportunities for the affected individuals, prevention of blindness has not been sufficiently addressed in many major international and domestic development agendas (e.g. Millennium development goals). There is insufficient scientific evidence on the impact of blindness in various socioeconomic settings as well as on limitations for uptake of eye care by those with low income. Further research in these areas needs to be encouraged.

OBJECTIVES AND ACTION

OBJECTIVE 1: Strengthen advocacy and provide support to increase political, financial and technical commitment in Member States to address avoidable blindness and visual impairment

The international advocacy for preservation of visual health aims to increase awareness of the current prevention of avoidable blindness and visual impairment agenda, especially the cost-effective disease control interventions available and international experience in their implementation. This advocacy effort needs to address health care professionals and policy-makers, to encourage intersectoral action for improvements in eye health care systems and the incorporation of eye health in broader health care and development agendas. It also needs to target potential donors and those who determine research priorities and their funding so that more evidence related to prevention of blindness and visual impairment and their impact is available.

The impact of risk factors needs to be further researched, such as smoking, diabetes mellitus, ultraviolet radiation, lack of hygiene as well as inequities in access to eye care services in order to appropriately adjust the advocacy efforts.

In addition, special attention needs to be paid to awareness creation efforts directed at the general public, finding appropriate ways of conveying information on prevention of visual loss and available ways of treating eye conditions. At the country level, the messages are based on the analyses of the pattern of causes of blindness and visual impairment in the population, geographical and socioeconomic conditions.

Proposed action for Member States

Establish and support posts for prevention of blindness and visual impairment at Ministries of Health and other key institutions as appropriate

Promote World Sight Day observation

Incorporate visual health preservation in health promotion agendas
Action for the Secretariat

Conduct political analyses of the best way of gaining support and commitment of high level decision makers for preservation of visual health, and explore opportunities for integrating preservation of visual health into work of political and economic unions among countries, such as the European Union, CARICOM, ASEAN, Pacific Islands etc.

Harmonize among international partners the advocacy messages used in various health and development forums.

Liaise with other programmes and groups to address major risk factors for visual impairment (e.g. consumption of tobacco, lack of micronutrients, diabetes mellitus, ultraviolet radiation, etc.)

Inform policy-makers about the relationship between eye diseases, poverty and development, using evidence-based information and epidemiological data.

Document links between the findings of the Commission on Social Determinants of Health and the prevention of avoidable blindness and visual impairment, and take forward the work on social determinants of health as it relates to eye diseases.

Proposed action for international partners

Include the prevention and control of blindness and visual impairment on global development work and in related investment decisions

Support WHO in involving all stakeholders in advocacy in order to raise awareness of the magnitude of blindness and visual impairment, and of the fact that cost-effective interventions are known as well as international experience in their implementation

Support Member States in creating forums where key stakeholders - including nongovernmental organizations, professional associations, academia, research institutions and the private sector - contribute and take concerted action against avoidable blindness and visual impairment

OBJECTIVE 2: Improve development, availability and adaptation of strategies and guidelines to address major vision threatening conditions

Normative work is one of core functions of WHO. Evidence-based WHO strategies for several main causes of avoidable blindness and visual impairment have been developed and implemented in a number of countries. While the WHO strategies for the control of trachoma, onchocerciasis, vitamin A deficiency, diabetic retinopathy and some aspects of cataract related visual loss exist, strategies for the remaining emerging major causes of visual loss need to be developed.

We need to make clear for MS that where there is capacity it is about developing local national strategies and corresponding guidelines. In MS where there is no capacity it is about using WHO strategies and guidelines after appropriate adaptation.

Proposed action for Member States

Where sufficient capacity exist, develop national strategies and corresponding guidelines for the prevention of blindness and visual impairment, otherwise consider adaptation of those recommended by WHO
Review existing policies addressing visual health, identify the gaps and develop new policies to support the development of a comprehensive eye care system

**Action for the Secretariat**

Develop evidence-based strategies for the control of uncorrected refractive errors including presbyopia, glaucoma, age-related macular degeneration and selected eye conditions in children.

Review and update current evidence for the formulation of strategies and guidelines for the prevention of avoidable blindness and visual impairment

**Proposed action for international partners**

Promote WHO recommended strategies and guidelines for prevention of blindness and visual impairment and use them in their planning and implementation of their prevention of blindness interventions

Actively and timely contribute to the national collection and consolidation of information on the implementation of WHO strategies and guidelines

**OBJECTIVE 3: Implementation of national policies, plans and programmes for the prevention of blindness and visual impairment**

National policies, plans and programmes for the prevention of avoidable blindness and visual impairment are essential instruments for coordinated, evidence-based, cost-effective interventions. Integration of eye health into relevant national health policies facilitates a coordinated multisectoral approach and development of comprehensive health care systems.

**Proposed action for Member States**

Where not finalized, develop, and progress with prevention of blindness plans implementation as per Resolutions WHA 56.26 and 59.25

Incorporate prevention of blindness and visual impairment in poverty-reduction strategies and in relevant socioeconomic policies.

Involve all relevant government sectors in design and implementation of prevention of blindness and visual impairment policies, plans and programmes

**Action for the Secretariat**

Collect and share experience on the role, functions and performance of national prevention of blindness committees.

Facilitate establishment and activities of national prevention of blindness committees, and advise Member States on their composition, role and function.
Disseminate updated information and best practices on the public health aspects of prevention of blindness to WHO country offices, Ministers of Health, national prevention of blindness committees and other key partners.

In a coordinated and standardized manner, collect, analyse and disseminate information on the implementation of national eye health related policies, on the available health insurance systems, and their impact on the various aspects of eye care provision.

**Proposed action for international partners**

Generate resources for, and in a coordinated manner, provide support to the implementation of national prevention of blindness plans in order to avoid duplication of efforts.

**OBJECTIVE 4: Increase and expand research for the prevention of blindness and visual impairment**

The prevention of blindness and visual impairment public health interventions need to be evidence-based and cost effective. International collaboration in the promotion of multidimensional and multisectoral research are essential for developing effective strategies and approaches for building comprehensive, integrated, equitable, high quality eye care systems. Special focus should be given to evaluation of interventions and different strategies for early detection and screening of the causes of blindness and visual impairment in different populations.

**Proposed action for Member States**

Ensure that national research institutions conduct research on socioeconomic determinants, gender, the cost-effectiveness of interventions, affordable technology, health system reorientation and workforce development as they relate to eye health.

Assess the economic cost of blindness and visual impairment and their impact on socioeconomic development.

Determine the impact of poverty and other determinants on the gradient of socioeconomic disparity in the individual's inequities in access to eye care services.

Ensure that epidemiological, behavioural, and health-system research is part of national programmes for the prevention of blindness and visual impairment.
**Action for the Secretariat**

Coordinate health system research, including the study of the effectiveness of different organizational patterns in health care institutions providing eye care, with a special focus on primary eye care, and the study of approaches for improving access to, and availability of, essential medicines, essential technologies and other elements of eye care.

Facilitate the development of models for projection of trends of the causes and magnitude of blindness and visual impairment for priority development and target setting of eye care systems.

Assist Member States to assess the impact of policies on the status of eye care systems and visual health in the populations and the ongoing public health strategies and guidelines and share the results.

Collate existing evidence on risk factors, such as smoking, diabetes mellitus, ultraviolet radiation, lack of hygiene.

In collaboration with the International Council of Ophthalmology, update a research agenda for the causes of blindness and visual impairment and involve other major relevant constituencies in prioritizing, implementing, and funding research projects.

**Proposed action for international partners**

Support low- and middle-income countries in building capacity for epidemiological and health-systems research, including the analytical and operational research required for programme implementation and evaluation in the area of eye diseases.

Support and work jointly on priority research on eye diseases at the global, regional and subregional levels.

Strengthen and support WHO collaborating centres and national research institutions in research related to prevention of blindness and visual impairment.

**OBJECTIVE 5: Improve coordination among partnerships and stakeholders at national and international level for the prevention of blindness and visual impairment**

Large international partnerships and alliances have been instrumental in the development of comprehensive and effective public health responses for the prevention of blindness and visual impairment. Member States, United Nations agencies, other international institutions, academia, research centres, professional organizations of health care providers, nongovernmental organizations, civil society and the corporate sector are key stakeholders in this process. The remaining challenge is incorporation of avoidable blindness and visual health into broader development initiatives which requires continuous effort in establishing new intersectoral collaborations and alliances.

**Proposed action for Member States**

Participate and actively support existing partnerships and alliances at national and international levels for the prevention of avoidable blindness and visual impairment.
Action for the Secretariat
Convene, in 2009, the WHO Monitoring Committee for the Elimination of Avoidable Blindness as per Resolution WHA 56.26.

Support and strengthen the role of WHO collaborating centres by linking their plans to the implementation of specific interventions outlined in this plan and convene coordinating meetings a minimum of every other year.

Convene coordinating meeting to review the collaboration among the major partnerships and alliances in order to improve joint planning and monitoring.

Proposed action for international partners
Collaborate closely with and provide support to Member States and the Secretariat in implementing the various components of this plan.

Liaise with other key international organizations and agencies with broader development agendas, to identify opportunities for collaboration.

OBJECTIVE 6: Monitor causes and magnitude of blindness and visual impairment and the capacity of countries to prevention blindness and visual impairment, in order to evaluate progress at the national, regional and global levels
Information on causes of blindness and visual impairment, their magnitude, geographical distribution and their trends are essential for evidence based advocacy and planning. Likewise understanding the constraints and gaps in current service delivery and monitoring how these are addressed by Member States is critical to successful implementation. Continuous monitoring and periodic evaluation of prevention of blindness interventions are essential for necessary and timely adjustments.

Proposed action for Member States
Strengthen standardized data collection and establish surveillance system on disease prevalence using WHO tools (e.g. for cataract, trachoma, onchocerciasis).

Regularly report and use the WHO standardized reporting system on progress made in implementation of national prevention of blindness plans.

Action for the Secretariat
By 2010, finalize baseline information on the impact of prevention of avoidable blindness and visual impairment interventions at country level, with the aim of showing a reduction in the magnitude of avoidable blindness as per Resolution WHA 56.26.

Document, from countries with successful blindness prevention programmes, good practices and blindness prevention systems or models that could be modified or applied in other countries as per Resolution WHA 56.26.
Arrange periodic independent evaluation of the prevention of blindness and visual impairment activities, including that of international partnerships, by the WHO Monitoring Committee for the Elimination of Avoidable Blindness.

**Proposed action for international partners**

Work collaboratively and provide support for the actions set out for Member States and the Secretariat in monitoring and evaluating, at the regional and global levels, progress in prevention and control of blindness and visual impairment.

Collaborate with WHO in developing monitoring network for regional and global monitoring and evaluation of progress in the prevention of blindness and visual impairment.

**INDICATORS**

In order to measure progress in implementing the prevention of blindness and visual impairment interventions, both quantitative and qualitative indicators need to be determined. The indicators will mostly focus on actions taken by the Secretariat and on the actions by Member States. Each country may develop its own set of indicators, based on priorities, and resources; however, in order to track the progress at global and regional levels, there is a need to collect data and information in a standardized manner. The indicators mentioned below are examples of measurements that WHO will use in monitoring and reporting on the global status of the prevention of blindness and visual impairment.

Baseline values are available in WHO for many of the indicators, however, where baselines are not currently available, mechanisms will be established to collect relevant data.

**Implementation of prevention of blindness and visual impairment, partnerships and alliances**

- Number of countries that have established a unit for the prevention of blindness and visual impairment (with dedicated staffing and budget) at Ministry of Health or equivalent national health authority;
- Number of countries which held a national prevention of blindness workshop;
- Number of countries that have established a national prevention of blindness committee;
- Number of countries that have developed a national prevention of blindness plan;
- Number of countries that have observed World Sight Day;
- Number of countries that have adopted a multisectoral policy for prevention of blindness and visual impairment;
- Number of countries with eye health research incorporated in their national research agenda.

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Eye-care service delivery

Geographical coverage - proportions of health administrative areas with and without comprehensive eye care; and proportions of health administrative areas with and without cataract surgical services;
Population served by one ophthalmologist or cataract surgeon - average size of the population served by one ophthalmologist;
Number of cataract surgeries per one cataract surgeon per standard period.

Indicators for prevalence of visual impairment and disease control

Prevalence of blindness and visual impairment at country and district levels, disaggregated by sex and age group;
Prevalence of blindness and visual impairment due to avoidable causes;
Cataract output - number of cataract operations at country and district levels;
Cataract surgical rate - number of cataract surgeries performed per million population per year, at country and district levels;
Cataract surgical coverage - proportion of people with bilateral cataract who have received surgery in one or both eyes (at 3/60 and 6/18 level), at country and district levels;
Intraocular lens implantation rate - proportion of all cataract surgeries with implanted intraocular lens, at country and district levels;
Control of refractive errors - proportion of people by age group with uncorrected refractive errors causing visual impairment (i.e. presenting < 6/18 visual acuity in the better eye), at country and district levels;
Control of low vision - number of persons with low vision needing low-vision services; proportion of countries in which low-vision services are established, at country and district levels;
Control of blinding trachoma - number of countries in which blinding trachoma is a public health problem; SAFE strategy coverage - proportion of endemic communities covered by SAFE strategy;
Control of onchocerciasis - population at risk for onchocerciasis; number treated annually with Mectizan®; coverage with treatment for onchocerciasis (comprises the ultimate treatment goal coverage, the therapeutic coverage, and the geographical coverage).

Indicators for human resource development

Ophthalmologists, optometrists, opticians, ophthalmic nurses, and other eye care related professions - number per million population.
Indicators for infrastructure and technology

Quality of eye care service (e.g. visual outcome after cataract surgery);
Populations served by primary, secondary and tertiary centres (absolute numbers);
Numbers of primary, secondary and tertiary centres in a country.