

# APPENDIX 2

## Cross-cutting principles and approaches

Universal access and equity	Human rights	Evidence-based practice	Life course approach	Empowerment of people with blindness and visual impairment
All people should have equitable access to health care and opportunities to achieve or recover the highest attainable standard of health, regardless of age, gender or social position	Strategies and interventions for treatment, prevention and promotion must be compliant with international human rights conventions and agreements	Strategies and interventions for treatment, prevention and promotion need to be based on scientific evidence and good practice	Eye health and related policies, plans and programmes need to take account of health and social needs at all stages of the life course	People who are blind or who have low vision can participate fully in the social, economic, political and cultural aspects of life

# APPENDIX 3

## Objectives and actions

Objective 1	Measurable indicators	Means of verification	Important assumptions
Evidence generated and used to advocate increased political and financial commitment of Member States for eye health	<p>Number of Member States that have undertaken and published prevalence surveys during the past five years by 2019</p> <p>Number of Member States that have completed and published an eye care service assessment over the last five years in 2019</p> <p>Observation of World Sight Day reported by Member States</p>	<p>Epidemiological and economic assessment on the prevalence and causes of visual impairment reported to the Secretariat by Member States</p> <p>Eye care service assessment and cost-effectiveness research results used to formulate national and subnational policies and plans for eye health</p> <p>Reports of national, regional and global advocacy and awareness-raising events</p>	Advocacy successful in increasing investment in eye health despite the current global financial environment and competing agendas
Actions for Objective 1	Proposed inputs from Member States	Inputs from the Secretariat	Proposed inputs from international partners
1.1 Undertake population-based surveys on prevalence of visual impairment and its causes	<p>Undertake surveys in collaboration with partners, allocating resources as required</p> <p>Publish and disseminate survey results, and send them to the Secretariat</p>	<p>Provide Member States with tools for surveys and technical advice</p> <p>Provide estimates of prevalence at regional and global levels</p>	<p>Advocate the need for surveys</p> <p>Identify and supply additional resources to complement governments' investments in surveys</p>

Actions for Objective 1	Proposed Inputs from Member States	Inputs from the Secretariat	Proposed inputs from international partners
<p>1.2 Assess the capacity of Member States to provide comprehensive eye care services and identify gaps</p>	<p>Assess eye care service delivery, allocating resources as required. Assessments should cover availability, accessibility, affordability, sustainability, quality and equity of services provided, including cost–effectiveness analysis of eye health programmes</p> <p>Collect and compile data at national level, identifying gaps in service provision</p> <p>Publish and disseminate survey results, and report them to the Secretariat</p>	<p>Provide Member States with tools for eye care service assessments and technical advice</p> <p>Publish and disseminate reports that summarize data provided by Member States and international partners</p>	<p>Advocate the need for eye care service assessments</p> <p>Support Member States in collection and dissemination of data</p> <p>Identify and supply additional resources to complement governments' investments in eye care service assessments</p>
<p>1.3 Document, and use for advocacy, examples of best practice in enhancing universal access to eye care</p>	<p>Identify and document successful interventions and lessons learnt</p> <p>Publish results and report them to the Secretariat</p>	<p>Develop tools and provide them to Member States along with technical advice</p> <p>Collate and disseminate reports from Member States</p>	<p>Advocate the need to document best practice</p> <p>Support Member States in documenting best practice and disseminating results</p> <p>Identify additional resources to complement governments' investments</p>

Objective 2	Measurable indicators	Means of verification	Important assumptions
<p>National eye health policies, plans and programmes for enhancing universal eye health developed and/or strengthened and implemented in line with WHO's framework for action for strengthening health systems in order to improve health outcomes</p>	<p>Number of Member States reporting the implementation of policies, plans and programmes for eye health</p> <p>Number of Member States with an eye health/prevention of blindness committee, and/or a national prevention of blindness coordinator, or equivalent mechanism in place</p> <p>Number of Member States that include eye care sections in their national lists of essential medicines, diagnostics and health technologies</p> <p>Number of Member States that report the integration of eye health into national health plans and budgets</p> <p>Number of Member States that report a national plan that includes human resources for eye care</p> <p>Number of Member States reporting evidence of research on the cost-effectiveness of eye health programmes</p>	<p>Reports that summarize data provided by Member States</p>	<p>Policies, plans and programmes have sufficient reach for all populations</p> <p>Services accessed by those in need</p>

Actions for Objective 2	Proposed inputs from Member States	Inputs from the Secretariat	Proposed inputs from international partners
<p>2.1 Provide leadership and governance for developing/updating, implementing and monitoring national/subnational policies and plans for eye health</p>	<p>Develop/update national/subnational policies, plans and programmes for eye health and prevention of visual impairment, including indicators and targets, engaging key stakeholders</p> <p>Secure inclusion of primary eye care into primary health care</p> <p>Establish new and/or maintain the existing coordinating mechanisms (e.g. national coordinator, eye health/prevention of blindness committee, other national/subnational mechanisms) to oversee implementation and monitoring/evaluating the policies, plans and programmes</p>	<p>Provide guidance to Member States on how to develop and implement national and subnational policies, plans and programmes in line with the global action plan</p> <p>Provide Member States with tools and technical advice on primary eye care, and evidence on good leadership and governance practices in developing, implementing, monitoring and evaluating comprehensive and integrated eye care services</p> <p>Establish/maintain global and regional staff with responsibility for eye health/prevention of visual impairment</p> <p>Establish country positions for eye health/prevention of visual impairment where strategically relevant and resources allow</p>	<p>Advocate national/subnational leadership for developing policies, plans and programmes</p> <p>Support national leadership in identifying the financial and technical resources required for implementing the policies/plans and inclusion of primary eye care in primary health care</p> <p>Secure funding for key positions in the Secretariat at headquarters, regional and country levels</p>

Actions for Objective 2	Proposed Inputs from Member States	Inputs from the Secretariat	Proposed Inputs from international partners
<p>2.2 Secure adequate financial resources to improve eye health and provide comprehensive eye care services integrated into health systems through national policies, plans and programmes</p>	<p>Ensure funding for eye health within a comprehensive integrated health care service</p> <p>Perform cost–benefit analysis of prevention of avoidable visual impairment and rehabilitation services and conduct research on the cost–effectiveness of eye health programmes to optimize the use of available resources</p>	<p>Provide tools and technical support to Member States in identifying cost–effective interventions and secure the financial resources needed</p>	<p>Advocate at national and international levels for adequate funds and their effective use to implement national/subnational policies, plans and programmes</p> <p>Identify sources of funds to complement national investment in eye care services and cost–benefit analyses</p>
<p>2.3 Develop and maintain a sustainable workforce for the provision of comprehensive eye care services as part of the broader human resources for health workforce</p>	<p>Undertake planning of human resources for eye care as part of wider human resources for health planning, and human resources for eye health planning in other relevant sectors</p> <p>Provide training and career development for eye health professionals</p> <p>Ensure retention strategies for eye health staff are in place and being implemented</p> <p>Identify, document and disseminate best practice to the Secretariat and other partners with regard to human resources in eye health</p>	<p>Provide technical assistance as required</p> <p>Collate and publish examples of best practice</p>	<p>Advocate the importance of a sustainable eye health workforce</p> <p>Support training and professional development through national coordination mechanisms</p> <p>Provide support to Member States in collection and dissemination of data</p>

Actions for Objective 2	Proposed inputs from Member States	Inputs from the Secretariat	Proposed inputs from international partners
<p>2.4 Provide comprehensive and equitable eye care services at primary, secondary and tertiary levels, incorporating national trachoma and onchocerciasis elimination activities</p>	<p>Provide and/or coordinate universal access to comprehensive and equitable eye care services, with emphasis on vulnerable groups such as children and the elderly</p> <p>Strengthen referral mechanisms, and rehabilitation services for the visually impaired</p> <p>Establish quality standards and norms for eye care</p>	<p>Provide WHO's existing tools and technical support to Member States</p>	<p>Advocate the importance of comprehensive and equitable eye care services</p> <p>Support local capacity building for provision of eye care services, including rehabilitation services in line with policies, plans and programmes through national coordination mechanisms</p> <p>Monitor, evaluate and report on services provided in line with national policies, plans and programmes through national coordination mechanisms</p>
<p>2.5 Make available and accessible essential medicines, diagnostics and health technologies of assured quality with particular focus on vulnerable groups and underserved communities, and explore mechanisms to increase affordability of new evidence-based technologies</p>	<p>Ensure existence of a national list of essential medical products, national diagnostic and treatment protocols, and relevant equipment</p> <p>Ensure the availability and accessibility of essential medicines, diagnostics and health technologies</p>	<p>Provide technical assistance and tools to support Member States</p>	<p>Advocate the importance of essential medicines, diagnostics and health technologies</p> <p>Provide essential medicines, diagnostics and health technologies in line with national policies</p>

Actions for Objective 2	Proposed inputs from Member States	Inputs from the Secretariat	Proposed inputs from international partners
2.6 Include indicators for the monitoring of provision of eye care services and their quality in national information systems	<p>Adopt a set of national indicators and targets, including those on rehabilitation, within the national information systems</p> <p>Periodically collect, analyse and interpret data</p> <p>Report data to the Secretariat</p>	<p>Provide technical support to Member States by including national indicators and targets in national health systems</p> <p>Collate and disseminate data reported by Member States annually</p>	<p>Advocate the importance of monitoring using nationally agreed indicators</p> <p>Provide financial and technical support for collection and analysis of national and subnational data</p>
Objective 3	Measurable indicators	Means of verification	Important assumptions
Multisectoral engagement and effective partnerships for improved eye health strengthened	<p>Number of Member States that refer to a multisectoral approach in their national eye health/prevention of blindness policies, plans and programmes</p> <p>The WHO Alliance for the Global Elimination of Trachoma by the Year 2020, African Programme for Onchocerciasis Control, and Onchocerciasis Elimination Program for the Americas deliver according to their strategic plans</p> <p>Number of Member States that have eye health incorporated into relevant poverty-reduction strategies, initiatives and wider socioeconomic policies</p> <p>Number of Member States reporting eye health as a part of intersectoral collaboration</p>	<p>Reports from Member States received and collated by the Secretariat</p> <p>Receipt of annual reports and publications from partnerships</p>	<p>Non-health sectors invest in wider socioeconomic development</p>

Actions for Objective 3	Proposed Inputs from Member States	Inputs from the Secretariat	Proposed inputs from international partners
3.1 Engage non-health sectors in developing and implementing eye health/prevention of visual impairment policies and plans	<p>Health ministries identify and engage other sectors, such as those under ministries of education, finance, welfare and development</p> <p>Report experiences to the Secretariat</p>	<p>Advise Member States on specific roles of non-health sectors and provide support in identifying and engaging non-health sectors</p> <p>Collate and publish Member States' experiences</p>	<p>Advocate across sectors the added value of multisectoral work</p> <p>Provide financial and technical capacity to multisectoral activities (e.g. water and sanitation)</p> <p>Provide support to Member States in collecting and disseminating experiences</p>
3.2 Enhance effective international and national partnerships and alliances	<p>Promote active engagement in, and where appropriate, establish partnerships and alliances that harmonize and are aligned with national priorities, policies, plans and programmes</p> <p>Identify and promote suitable mechanisms for intercountry collaboration</p>	<p>Where appropriate, participate in and lead partnerships and alliances, including engaging other United Nations entities, that support, harmonize and are aligned with Member States' priorities, policies, plans and programmes</p> <p>Facilitate and support establishment of intercountry collaboration</p>	<p>Promote participation and actively support partnerships, alliances and intercountry collaboration that harmonize and are aligned with Member States' priorities, policies, plans and programmes</p>
3.3 Integrate eye health into poverty-reduction strategies, initiatives and wider socioeconomic policies	<p>Identify and incorporate eye health in relevant poverty-reduction strategies, initiatives and socioeconomic policies</p> <p>Ensure that people with avoidable and unavoidable visual impairment have access to educational opportunities, and that disability inclusion practices are developed, implemented and evaluated</p>	<p>Write and disseminate key messages for policy-makers</p> <p>Advise Member States on ways to include eye health/prevention of visual impairment in poverty-reduction strategies, initiatives and socioeconomic policies</p>	<p>Advocate the integration of eye health into poverty-reduction strategies, initiatives and socioeconomic policies</p>

## APPENDIX 4

### National indicators for prevention of avoidable blindness and visual impairment

#### 1. Prevalence and causes of visual impairment

<b>Purpose/rationale</b>	To measure the magnitude of visual impairment including blindness and monitor progress in eliminating avoidable blindness and in controlling avoidable visual impairment
<b>Definition</b>	Prevalence of visual impairment, including blindness, and its causes, preferably disaggregated by age and gender
<b>Preferred methods of data collection</b>	Methodologically sound and representative surveys of prevalence provide the most reliable method. Additionally, the Rapid Assessment of Avoidable Blindness and the Rapid Assessment of Cataract Surgical Services are two standard methodologies for obtaining results for people in the age group with the highest prevalence of visual impairment, that is, those over 50 years of age
<b>Unit of measurement</b>	Prevalence of visual impairment determined from population surveys
<b>Frequency of data collection</b>	At national level at least every five years
<b>Source of data</b>	Health ministry or national prevention of blindness/eye health coordinator/committee
<b>Dissemination of data</b>	The Secretariat periodically updates the global estimates on the prevalence and causes of visual impairment

#### 2. Number of eye care personnel by cadre

##### 2.1 Ophthalmologists

<b>Purpose/rationale</b>	To assess availability of the eye health workforce in order to formulate a capacity-development response for strengthening national health systems. Ophthalmologists are the primary cadre that deliver medical and surgical eye care interventions
<b>Definition</b>	Number of medical doctors certified as ophthalmologists by national institutions based on government-approved certification criteria. Ophthalmologists are medical doctors who have been trained in ophthalmic medicine and/or surgery and who evaluate and treat diseases of the eye
<b>Preferred methods of data collection</b>	Registers of national professional and regulatory bodies

<b>Unit of measurement</b>	Number of ophthalmologists per one million population
<b>Frequency of data collection</b>	Annually
<b>Limitations</b>	The number does not reflect the proportion of ophthalmologists who are not surgically active; clinical output (e.g. subspecialists); performance; and quality of interventions. Unless disaggregated, the data do not reflect geographical distribution
<b>Source of information</b>	Health ministry or national prevention of blindness/eye health coordinator/committee
<b>Dissemination of data</b>	The Secretariat annually issues a global update based on the national data provided by Member States

## 2.2 Optometrists

<b>Purpose/rationale</b>	To assess availability of the eye health workforce in order to formulate a capacity-development response for strengthening national health systems. In an increasing number of countries, optometrists are often the first point of contact for persons with eye diseases
<b>Definition</b>	Number of optometrists certified by national institutions based on government-approved certification criteria
<b>Preferred methods of data collection</b>	Registers of national professional and regulatory bodies
<b>Unit of measurement</b>	Number of optometrists per one million population
<b>Frequency of data collection</b>	Annually
<b>Limitations</b>	<p>The number does not denote performance, especially the quality of interventions to reduce avoidable blindness. There is a wide variability in knowledge and skill of optometrists from one nation to another because curricula are not standardized</p> <p>Numbers do not reflect the proportion of ophthalmic clinical officers, refractionists and other such groups who in some countries perform the role of optometrists where this cadre is short staffed or does not exist</p>
<b>Source of information</b>	Health ministry or national prevention of blindness/eye health coordinator/committee
<b>Dissemination of data</b>	The Secretariat annually issues a global update based on the national data provided by Member States

### 2.3 Allied ophthalmic personnel

<b>Purpose/rationale</b>	To assess availability of the eye health workforce in order to formulate a capacity-development response for strengthening national health systems. Allied ophthalmic personnel may be characterized by different educational requirements, legislation and practice regulations, skills and scope of practice between countries and even within a given country. Typically, allied ophthalmic personnel comprise opticians, ophthalmic nurses, orthoptists, ophthalmic and optometric assistants, ophthalmic and optometric technicians, vision therapists, ocularists, ophthalmic photographer/imagers, and ophthalmic administrators
<b>Definition</b>	Numbers of allied ophthalmic personnel comprising professional categories, which need to be specified by a reporting Member State
<b>Preferred methods of data collection</b>	Compilation of national data from subnational (district) data from government, nongovernmental and private eye care service providers
<b>Unit of measurement</b>	Number of allied ophthalmic personnel per one million population
<b>Frequency of data collection</b>	Annually
<b>Limitations</b>	The numbers do not denote performance, especially the quality of interventions to reduce avoidable blindness. There is a wide variability in knowledge and skill. These data are useful for monitoring of progress in countries over time but they cannot be reliably used for intercountry comparison because of variation in nomenclature
<b>Source of information</b>	Health ministry or national prevention of blindness/eye health coordinator/committee
<b>Dissemination of data</b>	The Secretariat annually issues a global update based on the national data provided by Member States

## 3. Cataract surgical service delivery

### 3.1 Cataract surgical rate

<b>Purpose/rationale</b>	The rate can be used to set national targets for cataract surgical service delivery. It is also often used as a proxy indicator for general eye care service delivery. Globally, cataract remains the leading cause of blindness. Visual impairment and blindness from cataracts are avoidable because an effective means of treatment (cataract extraction with implantation of an intraocular lens) is both safe and efficacious to restore sight. The cataract surgical rate is a quantifiable measure of cataract surgical service delivery
<b>Definition</b>	The number of cataract operations performed per year per one million population
<b>Preferred methods of data collection</b>	Government health information records, surveys

<b>Unit of measurement</b>	Number of cataract operations performed per one million population
<b>Frequency of data collection</b>	Annually at national level. In larger countries it is desirable to collate data at subnational level
<b>Limitations</b>	This indicator is meaningful only when it includes all cataract surgeries performed in a country, that is, those performed within the government and nongovernmental sectors
<b>Comments</b>	For calculations, use official sources of population data (United Nations)
<b>Source of information</b>	Health ministry or national prevention of blindness/eye health coordinator/committee
<b>Dissemination of data</b>	The Secretariat annually issues a global update based on the national data provided by Member States

### 3.2 Cataract surgical coverage

<b>Purpose/rationale</b>	To assess the degree to which cataract surgical services are meeting the need
<b>Definition</b>	Proportion of people with bilateral cataract eligible for cataract surgery who have received cataract surgery in one or both eyes (at 3/60 and 6/18 level)
<b>Preferred methods of data collection</b>	Calculation using data from methodologically sound and representative prevalence surveys. Additionally, calculation using data from the Rapid Assessment of Avoidable Blindness and the Rapid Assessment of Cataract Surgical Services, which are two standard methodologies to obtain results for people in the age group with the highest prevalence of blindness and visual impairment due to cataract, that is, those over 50 years of age
<b>Unit of measurement</b>	Proportion
<b>Frequency of data collection</b>	Determined by the frequency of performing a national/district study on the prevalence of blindness and visual impairment and their causes
<b>Limitations</b>	Requires population-based studies, which may be of limited generalization
<b>Comments</b>	Preferably data are disaggregated by gender, age, and urban/rural location or district
<b>Source of information</b>	Health ministry or national prevention of blindness/eye health coordinator/committee
<b>Dissemination of data</b>	The Secretariat periodically issues updates

