# **Eye care service assessment tool**



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# Introduction

To increase efforts to improve eye health globally, the Sixty-sixth World Health Assembly endorsed the *Universal eye health: a global action plan 2014–2019* by adopting resolution WHA66.4.<sup>1</sup> The action plan reflects five principles: universal access and equity, human rights, evidence-based practice, a life-course approach and empowerment of people with visual impairment. The action plan is based on the health system approach, in which eye care programmes are integrated into the wider health care system at primary, secondary and tertiary levels.

The plan presents Member States with a set of actions from which they can choose those most appropriate to their setting and needs. In order to do so and to make progress towards universal access to high-quality, comprehensive, integrated eye care, the interventions must be based on evidence about the extent and causes of visual impairment in the population and the gaps in current provision of eye care. The "eye care service assessment tool" (ECSAT) allows users to collect data and information on the provision of eye care at country or district level and to determine whether it meets the objectives of the global eye health action plan.

ECSAT has three main sections, which follow the structure of the global eye health action plan. Section 1 covers the availability of data on the prevalence and causes of visual impairment, gaps in eye care services and use of evidence for securing support for eye health. Section 2 provides guidance for assessing the status and functionality of a country's eye care service on the basis of the six areas of the WHO framework for strengthening health systems. Section 3 gives guidance for determining the extent to which eye health is covered in multisectoral agendas and for engaging in national and international eye health partnerships.

## Modular structure of ECSAT

The modular structure of ECSAT allows the user to either complete the entire set of questions or to select sets of questions for specific areas. Completing the entire set of questions will give a more comprehensive overview of the available data and information on eye health and eye care service provision; however, the modular structure gives users the option of collecting data and conducting research in specific areas, such as eye care services in general or the eye care available for people with specific conditions, such as uncorrected refractive errors, cataract, glaucoma, ocular complication in diabetes, retinal eye disorders and selected eye conditions in children. Additionally, for instance, the user can focus on assessing the provision of services for low vision and rehabilitation,

<sup>1</sup> Universal eye health: a global action plan, 2014–2019. Geneva: World Health Organization; 2013 (www. who.int/blindness/AP2014\_19\_English.pdf?ua=1).

management and financing of eye care, human resources for eye care, evidence for advocacy and multisectoral engagement.

## How to use ECSAT

Each section of ECSAT contains a set of questions that prompt the respondent to tick boxes, provide narrative or both. The information necessary to complete ECSAT is usually derived from interviews with personnel at the ministry of health and other relevant government institutions (such as the ministries of finance and education), national societies of eye care professionals, organizations for people with visual impairment, desk examination of publically accessible sources and, to a certain extent, proactive collection of information. Completion of the ECSAT questionnaire should not take an unreasonable amount of time. It should rather result in understanding which information is available, consideration of whether it is needed, given the overall status of eye care provision in the country or district, and agreement on the steps to be taken to obtain the necessary information. ECSAT should thus be used as guidance for identifying gaps that require further consideration.

## **Users of ECSAT**

ECSAT is designed primarily for national and district eye care planners, policy-makers, professional standard-setting agencies, their international and national partners and other health care professionals. It is intended to help decision-makers and others understand the additional actions required to obtain evidence and to identify gaps in eye care service provision, in order to strengthen access to high-quality, comprehensive, integrated eye care services.

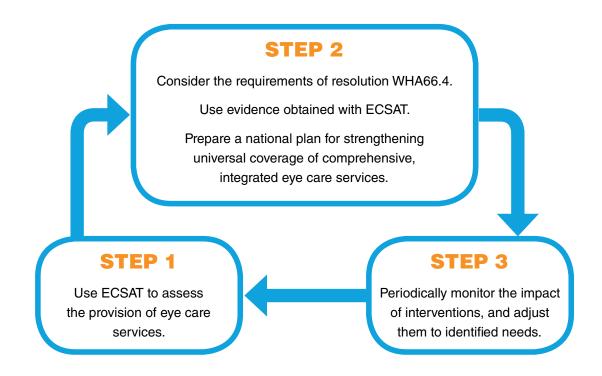
## Use of information obtained with ECSAT

Many Member States have established eye health or prevention of blindness committees, which are usually led by ministries of health charged with planning and implementation of evidence-based interventions at national and district levels. This has resulted in plans and similar strategic documents on eye health or prevention of blindness that are integrated to various degrees in national health programmes. The current plans and strategies of some Member States should be updated in line with resolution WHA66.4 on the global eye health action plan, while in others new plans and strategies are required.

The prerequisite for evidence-based work to update or prepare a national or district plan for implementation of the global eye health action plan is the availability of information on the current epidemiology of eye disease and the provision of eye care services in the country or area. Analysis of this information should result in identification of gaps and needs. While the main aspects of eye care service provision that are to be reviewed and assessed are described in the global eye health action plan, ECSAT was designed to facilitate information

collection in a structured way. A new or updated national plan of action for implementing the global eye health action plan can be based on the information obtained with ECSAT.

ECSAT is also intended to assist implementation of evidence-based interventions, as periodic completion of the questionnaire can provide data and information for assessing the impact of interventions and identify trends and newly emerging needs. These findings should be included in refining and updating national plans for continuous activities. The process and suggested use of ECSAT are illustrated below.



The main goal of eye care services is to reduce avoidable visual impairment as a global public health problem and to secure access to rehabilitation services for the visually impaired. This requires a dedicated programme to provide a continuum of high-quality, comprehensive, integrated eye care, with respect for equity and gender and the needs of vulnerable groups and underserved communities.

The global eye health action plan is outlined in Annex 1, experience in securing the support of policy- and decision-makers in Annex 2 and basic information on universal health coverage and health system strengthening in Annex 3, to introduce the concepts of resolution WHA66.4 and ECSAT.

# Background information and country socioeconomic indicators

Country name:		
WHO region:		
Respondent's contact details:		
First (and middle) name	Family name	
Professional credentials (e.g. MD, PhD)		
Profession or position		
Institution		
Street and number		
City		Postcode
Country		
Telephone number	E-mail	

Briefly describe how the data and information presented were obtained, which individuals or groups were interviewed and who participated directly in writing the final report:

1

Population       1. Provide the most recent source of information and the reference, e.g. national census or United Nations estimate, and indicate the year for which the figure was available.         Source:       Census         Census       Life tables can be obtained from the United Nations Department of Economic and Social Affairs web site; and site; and social site; and soci		
Source:       United Nations Department of Economic and Social Affairs web site: http:// ess.un.org/unpd/wpp/unpp/panel_ population.htm         Source       Image: Source of information: Males Females         Health information       1. Suggested source of information: WHO http://www.who.int/countries/en/ 2. Life expectancy at birth (years)         Source       Image: Source of information: WHO http://www.who.int/countries/en/ 2. Life expectancy at birth (years)         Source       Image: Source of information: WHO http://www.who.int/fourtries/en/ 2. Life expectancy at birth (years)         Source       Both sexes         Mortality rate of children < 5 years per 1000 live births: http://www.who.int/gho/ mortality_burden_disease/life_tables/ situation_treat_ext/an/ 3. Mortality rate of children < 5 years per 1000 live births: http://www. who.int/gho/child_health/mortality/ mortality_inde_org/en/countries         Economic information Most recent gross domestic product (GDP) measured as purchasing power parity in international dollars       1. GDP converted to international dollars with purchasing power areit the GDP as the USS has in the USA.         Value: Year:       2. Suggested source of information: Human Development Report 2014 http://dir.undp.org/en/countries and World Bark: http://dat.worldbank.org/ Hutte://dat.worldbank.org/ Hutte://dat.worldbank.org/ Hutte://dat.worldbank.org/ Hutte://dat.worldbank.org/ Hutte://dat.worldbank.org/	Total population of the country:	information and the reference, e.g. national census or United Nations estimate, and indicate the year for which
Health information <ul> <li>Suggested source of information: WHO http://www.who.int/countries/en/</li> <li>Life expectancy at birth (years)</li> <li>Source</li> <li>Source</li> </ul> <ul> <li>Source</li> <li>Both sexes</li> <li>Mortality rate of children &lt; 5 years per 1000 live births</li> <li>Source</li> <li>Mortality rate of children &lt; 5 years per 1000 live births</li> <li>Source</li> </ul> <ul> <li>Both sexes</li> <li>Mortality rate of children &lt; 5 years per 1000 live births</li> <li>Source</li> <li>Source</li> <li>Introphysical children &lt; 5 years per 1000 live births</li> <li>Source</li> <li>Source</li> <li>Source</li> <li>Introphysical children &lt; 5 years per 1000 live births</li> <li>Source</li> <li>Source</li></ul>	Census	United Nations Department of Economic and Social Affairs web site: http:// esa.un.org/unpd/wpp/unpp/panel_
Males         Females           Life expectancy at birth (years)         2. Life expectancy at birth reflects the overall mortality of a population. It summarizes the mortality pattern that prevalis in all age groups in a given year (children, adolescents, adults and the elderly). http://www.who.int/gho/ mortality_burden_disease/life_tables/ situation_trends_text/en/           Both sexes         Mortality rate of children < 5 years per 1000 live births           Source         3. Mortality rate of children < 5 years per 1000 live births           Source         4. Additional source of information: Human Development Report 2014 http://hdr.undp.org/en/countries           Kost recent gross domestic product (GDP) measured as purchasing power parity in international dollars         1. GDP converted to international dollars with purchasing power over the GDP as the US\$ has in the USA.           Value: Year:         2. Suggested source of information: Human Development Report 2014 http://hdr.undp.org/en/countries and World Bark: http://data.worldbank.org/	Source	
Life expectancy at birth       2. Life expectancy at birth         (years)       2. Life expectancy at birth         Source       2. Life expectancy at birth enterts the overall mortality of a population. It summarizes the mortality pattern that prevails in all age groups in a given year (children, adolescents, adults and the elderly). http://www.who.int/gho/mortality_burden_disease/life_tables/ situation_trends_text/en/         Source       Both sexes         Mortality rate of children < 5 years per 1000 live births: http://www.who.int/gho/child_heatth/mortality/	Health information	
Life expectancy at birth       overall mortality of a population. It         (years)       overall mortality of a population. It         Source       summarizes the mortality pattern that         Provide the elderly.       http://www.who.int/gho/mortality_burden_disease/life_tables/         Mortality rate of children < 5 years per	Males Females	2. Life expectancy at birth reflects the
Both sexes         Mortality rate of children < 5 years per 1000 live births         Source         Beconomic information         Most recent gross domestic product (GDP) measured as purchasing power parity in international dollars         Value:         Value:         Year:		overall mortality of a population. It summarizes the mortality pattern that
Both sexes       per 1000 live births: http://www.         Mortality rate of children < 5 years per 1000 live births       per 1000 live births: http://www.         Source       who.int/gho/child_health/mortality/ mortality_under_five_text/en         4. Additional source of information: Human Development Report 2014 http://hdr.undp.org/en/countries         Economic information         Most recent gross domestic product (GDP) measured as purchasing power parity in international dollars         Value:         Value:         Year:	Source	the elderly). http://www.who.int/gho/ mortality_burden_disease/life_tables/
Mortality rate of children < 5 years per 1000 live births       per 1000 live births: http://www. who.int/gho/child_health/mortality/ mortality_under_five_text/en         Source       4. Additional source of information: Human Development Report 2014 http://hdr.undp.org/en/countries         Economic information       1. GDP converted to international dollars with purchasing power parity in international dollars         Walue:       2. Suggested source of information: Human Development Report 2014 http://hdr.undp.org/en/countries and World Bank: http://hdr.undp.org/en/countries and	Both sexes	
Source       4. Additional source of information: Human Development Report 2014         http://hdr.undp.org/en/countries       http://hdr.undp.org/en/countries         Economic information       1. GDP converted to international dollars with purchasing power parity rates. An international dollar has the same purchasing power over the GDP as the US\$ has in the USA.         Value:       2. Suggested source of information: Human Development Report 2014         Year:       http://hdr.undp.org/en/countries and World Bank: http://data.worldbank.org/ indicater/Wi CDP BCAP BPC //	Mortality rate of children < 5 years per	who.int/gho/child_health/mortality/
Most recent gross domestic product (GDP) measured as purchasing power parity in international dollarswith purchasing power parity rates. An international dollar has the same purchasing power over the GDP as the US\$ has in the USA.Value:2. Suggested source of information: Human Development Report 2014 http://hdr.undp.org/en/countries and World Bank: http://data.worldbank.org/ indicator/NX CDD RCAP RP.CD	Source	Human Development Report 2014
Most recent gross domestic product (GDP) measured as purchasing power parity in international dollarswith purchasing power parity rates. An international dollar has the same purchasing power over the GDP as the US\$ has in the USA.Value:2. Suggested source of information: Human Development Report 2014 http://hdr.undp.org/en/countries and World Bank: http://data.worldbank.org/ indicator/NX CDD RCAP RP.CD		
Value:       2. Suggested source of information: Human Development Report 2014         Year:       http://hdr.undp.org/en/countries and World Bank: http://data.worldbank.org/ indicator/NX_CDP_RCAP_RP_CD	Most recent gross domestic product (GDP) measured as purchasing	with purchasing power parity rates. An international dollar has the same
Year: Year:		
Year: http://hdr.undp.org/en/countries and World Bank: http://data.worldbank.org/ indicator/NX_CDP_BCAP_PB_CD	Value:	
Source: indicator/NY.GDP.PCAP.PP.CD	Year:	http://hdr.undp.org/en/countries and World Bank: http://data.worldbank.org/
	Source:	indicator/NY.GDP.PCAP.PP.CD



Health care financing		Recommended sources for health expenditure: http://www.who.int/	
Total expenditure on health per capita:		countries/en/	
		and	
Value:	Currency:	http://apps.who.int/gho/data/view. main.1920ALL	
Year:			
Total expenditure on health as percentage of gross domestic product (GDP):			
Value:	Currency:		
Year:			
Source			

# 1. Evidence for advocacy and awareness creation

## 1.1 Prevalence and causes of visual impairment

Is there information on the prevalence and causes of visual impairment, including blindness, in the country?

Yes No

If "Yes", provide the following information:

Is available data divided into severe and moderate visual impairment or only for low vision (combined data)?

Category	Prevalence (%)	Three main causes	Year to which prevalence applies
Moderate visual	Male:		
<b>impairment</b> < 6/18 to ≥ 6/60	Female:		
	Total:		
Severe visual impairment	Male:		
< 6/60 to ≥ 3/60	Female:		
	Total:		
Low vision (if data are	Male:		
available only for the joint category of	Female:		
moderate and severe visual	Total:		
impairment) $< 6/18$ to $\ge 3/60$			
Blindness < 3/60	Male:		
	Female:		
	Total:		

1. Recommended source for regional information: Global data on visual impairment 2010 http:// www.who.int/blindness/en/

2. More information on eye disease epidemiology indicators in Appendix 4, WHA66.4 Universal eye health: a global action plan 2014–2019.

3. Rapid assessment of avoidable blindness, http://www.raabdata. info/

4. Sources for estimates of prevalence are published studies in international or national journals and unpublished reports.

5. When possible, provide data disaggregated by e.g. gender, age, rural or urban residence, to better understand the needs of population segments, vulnerable and marginalized communities and geographical distribution.

Prevalence of visual impa	airment disag	gregated by	age	
Others (specify)	(Adjust and/o	<b>e group (yea</b> or add interva vailable inforr	ls according	Others (specify)
	50–59	60–69	≥ 70	
Prevalence of moderate	visual impair	ment (%)		
Male				
Female				
Total				
Prevalence of severe vis	sual impairme	nt (%)		
Male				
Female				
Total				
Prevalence of low vision (if data are available only for t		of moderate a	and severe visu	al impairment)
Male				
Female				
Total				
Prevalence of blindness	s (%)			
Male				
Female				
Total				
Source of information on	prevalence and	d causes:		
National epidemiolog		idable blindn	ess)	
Estimate from studie	es in the countr	у		
Estimate based on V	VHO regional e	estimate		
Provide the published or ur	-			d.
Provide the published of ut	ipublished rele		sources use	u.

1.2 Are there plans for epidemiological surveys of the extent and causes of visual impairment, including blindness, in the country?YesNo	1. The decrease in the extent of visual impairment as monitored in national surveys or rapid assessments is the indicator of successful implementation of resolution WHA66.4 on universal eye health.
If "Yes", provide details on when, where, method to be used and organization. Is WHO involved in the planned surveys?	2. To request WHO assistance in conducting an epidemiological survey, contact whopbd@who.int
1.3 Are there additional sources of information on the prevalence and causes of visual impairment and blindness?	When possible, provide data disaggregated by e.g. gender, age, rural or urban residence to better understand the needs of population segments,
Yes No	vulnerable and marginalized communities and geographical
If "Yes," provide references and/or websites:	distribution.
What are these sources of information?	
Records of eye care facility or hospital	
Studies in schools for the blind	
Registers of retinopathy of prematurity	
National or subnational registers of blind and visually impaired people	
Other (specify):	

1.4 Have marginalized communities, vulnerable groups or groups that are underserved with eye care services been identified and documented?YesNoIf "Yes," provide details and references:	Disaggregated data and prevalence and causes of visual impairment and blindness and the provision and uptake of eye care services, including low vision, and rehabilitation by the identified communities are needed for better planning, provision and uptake of comprehensive eye care services.
1.5 Has there been a recent, major national or district advocacy initiative to give priority and allocate additional resources to eye care? Yes No If "Yes", indicate who conducted the activities: National society of ophthalmology Other eye care professional organizations Civil society and non-state actors Patient associations Others (specify): Provide details of the initiatives:	<ol> <li>National societies of eye care professionals and bodies representing people with visual impairment and blindness may be engaged in advocacy at national and district levels.</li> <li>For more information, see http://www.who.int/blindness/ Politicalanalysis.pdf?ua=1</li> </ol>
1.6 Have there been major activities to increase public and government awareness about preventing vision loss?YesNoIf "Yes," provide details of the activities and who conducted them:	Public awareness activities include programmes on television, radio, the Internet, tweets, billboards and brochures.

1.7 World Sight Day	World Sight Day is observed
Is World Sight Day observed in the country? Yes No If "Yes", provide details of the World Sight Day activities, and indicate who conducted them:	annually on the second Thursday in October. National activities include free eye clinics, eye health information booths, programmes on television, radio, the Internet, tweets, billboards, brochures. For more information, see: http://www.iapb.org/wsd14.
1.8 Are there any case studies on increasing universal eye care coverage in the country (e.g. focusing on gender, equity or marginalized communities)? Yes No If "Yes", provide references or web sites:	Some countries, institutions and international partners have published case studies on their experiences in the country.
1.9 Additional evidence for advocacy and awareness creation:	

# 2. Enhancing comprehensive eye care services through the WHO health system approach

# 2.1 Leadership and governance

## 2.1.1 Structure of eye care provision in the country:

Is there a nationally accepted list of diagnostic and treatment procedures that are provided by primary, secondary and tertiary eye care establishments?

Yes

If "Yes," indicate for each who provides the list and whether it is endorsed by the government:

Provide references or websites:

No

If "No," indicate how the scope of eye care services is determined at primary, secondary and tertiary levels:

1. The areas referred to in this section are usually addressed in government documents (e.g. ministry of health or education). In the responses, indicate the source of information. Providers and the scope of primary, secondary and tertiary eye care may differ by setting and country.

2. For the purpose of this document, primary eye care comprises prevention and treatment of the commonest eye conditions and referral for most surgical and advanced treatments (such as cataract and glaucoma surgery). Secondary eye care comprises primary eye care services plus surgical services for the commonest eye conditions, such as cataract and glaucoma. Tertiary eye services should comprise all subspecialty eye care services, including advanced diagnostic, medical and surgical treatment for both children and adults. Facilities for such sophisticated eye care are often available in university hospitals or similar institutions.

# Regarding diagnosis and treatment of eye conditions, is the range of eye care services specified for each of the following professional eye care groups?

#### **Ophthalmologists:**

Yes. Indicate by whom the scope is specified and whether it is endorsed by the government:

No. Indicate how the scope of eye care services provided by ophthalmologists is determined:

#### **Optometrists:**

Yes. Indicate by whom the scope is specified and whether it is endorsed by the government:

No. Indicate how the scope of eye care services provided by optometrists is determined:



#### Opticians

Yes. Indicate by whom the scope is specified and whether it is endorsed by the government:

No. Indicate how the scope of eye care services provided by opticians is determined:

#### **Ophthalmic nurses:**

Yes. Indicate by whom the scope is specified and whether it is endorsed by the government:

No. Indicate how the scope of eye care services provided by ophthalmic nurses is determined:

Is there an official process for issuing a licence to eye care professionals allowing them to practise in the country for each of the following professional eye care groups?

#### Ophthalmologists:

Yes. Indicate who issues the licence and whether it is endorsed by the government:

No. Indicate how the ophthalmologist's practice is approved:

#### **Optometrists**:

Yes. Indicate who issues the licence and whether it is endorsed by the government:

No. Indicate how the optometrist's practice is approved:



#### **Opticians**:

Yes. Indicate who issues the licence and whether it is endorsed by the government:

No. Indicate how the optician's practice is approved:

Ophthalmic nurses:

Yes. Indicate who issues the licence and whether it is endorsed by the government:

No. Indicate how ophthalmic nurses' practice is approved:

# 2.1.2 Provision of eye care in the country at the three levels of care

Tertiary eye care centres are further addressed in 2.4.1.

What is the percentage supplied by:

Level of eye care provision Eye care provider	Primary eye care (%)	Secondary eye care (%)	Tertiary eye care (%)
Government			
Private practitioners, covered by patients' health insurance			
Private practitioners, out-of-pocket payment by patients			
Non-state actors			
Others (specify)			
Total	100%	100%	100%

Is data sourced (provide references) or estimated by the respondent?

More at WHO global strategy on people-centred, integrated health services http://www.who.int/topics/

primary\_health\_care/en/

### 2.1.3 Codes of conduct, national policies and clinical guidelines

Is there the nationally accepted code of conduct for

Ophthalmologists: Ye	es No	
----------------------	-------	--

<ul> <li>Optometrists:</li> </ul>	Yes	No
-----------------------------------	-----	----

Others (specify):

If "Yes", provide references or websites:

Some national ophthalmologist societies have eye care guidelines or translate or recommend internationally accepted clinical guidelines in order to standardize eye care in the country. Some guidelines may be supported by the government and have legal bearing in the form of policy or law, such as for screening and eye care services for newborn infants, low birth-weight infants at risk for retinopathy of prematurity and eye screening at school. List those endorsed by the government.

Are there government-endorsed **policies** to ensure access to eye care for:

<ul> <li>Newborn infants:</li> </ul>	Yes	No
--------------------------------------	-----	----

• Low birth-weight infants at risk for retinopathy of prematurity:

	Yes	No
• Eye screening at school:	Yes	No
The elderly:	Yes	No

• Others (specify):

Do national associations of eye care professionals issue eye care **clinical** guidelines?

Yes No

Are the clinical guidelines from national societies of eye care professionals supported or officially endorsed by the government?

Yes No

Provide details and additional information:

#### 2.1.4 Is there a coordinator or focal person responsible for eye health and the prevention of blindness at the Ministry of Health?

Yes. Provide name and contact details:

In some countries, national coordinators are appointed for eye health and the prevention of blindness, who work within the Ministry of Health. In other countries, eye health may be part of a larger portfolio at the Ministry of Health.

No. If there is no person at the Ministry of Health responsible exclusively for eye health and the prevention of blindness, describe how this is addressed:

# 2.1.5 Does the Ministry of Health have a national plan for eye health and the prevention of blindness?

Yes No

If "Yes," state who implements and monitors the plan, provide an electronic copy and provide any records, such as published yearly reports or web-based information.

If "No," is there another national plan for eye health and the prevention of blindness?

Yes. Provide an electronic copy and provide any records, such as published yearly reports or web-based information.

No

For additional space, use pages 98–100.

1. In some countries (mostly high-income), national eye health plans are an integral part of national health plans.

2. In other countries (mostly middle- and low-income), national plans for eye health and the prevention of blindness were prepared to respond to needs identified in a national assessment.

3. Monitoring mechanisms should be in place to record progress and adjust the plan to actual needs.

# 2.1.6 Is there a committee for eye health and the prevention of blindness in the Ministry of Health?

Yes. List the members of the committee and their contact details.

In many countries, the national committee for eye health and the prevention of blindness, led by the Ministry of Health, is involved in designing, implementing and monitoring the national plan for eye health and the prevention of blindness.

No

If "Yes," what is the frequency of meetings of the committee?

Yearly

Quarterly

Other (specify):

### 2.1.7 Are there national societies of eye care professionals?

Ophthalmologists	Yes	No
Optometrists	Yes	No
Other eye care professionals	Yes	No

List the main societies of eye care professionals and contact details or web sites.

For additional space, use pages 98–100.

2.1.8 Are there any organizations for visually impaired and blind children and adults?	
Yes. List them, with contact details and summarize the availability and roles of organizations for visually impaired and blind children and adults:	
No	
2.1.9 Additional information on leadership and governance:	

# 2.2 Eye care financing

<b>2.2.1 Financing of eye care services in the country</b> Does the budget of the Ministry of Health include a specific allocation for eye care services?	The areas referred to in this section are usually described in publically available government documents.
Yes No	
If "Yes," what percentage of the budget is earmarked for eye care:	

# 2.2.2 Providers of eye care services in the country

Does the government provide eye care services?

Yes No

If "Yes", select one or more of the following options:

All services are free

Patients pay a nominal fee.

Some eye care services are free, while others are paid fully or in part by patients.

The costs are fully covered by health insurance.

Services are partly paid by health insurance.

Services are fully paid by patients.

Others, specify:

Are eye care services provided by ophthalmologists in private practice?

Yes No

If "Yes," select one or more of the following options:

Costs are fully covered by health insurance.

Services are paid in part by health insurance.

Costs are reimbursed by employers.

Services are fully paid by patients.

Others, specify:

1. Eye care services may be provided to the population by the government, private practitioners or non-state actors.

2. WHO defines a non-state actor as an entity that is not part of any state or a public institution: http://www.who. int/about/collaborations/ non-state-actors/register/en/

Do non-state actors provide eye care services in the country?

Yes No

If "Yes," select one or more of the following options:

Eye care services are free for selected individuals.

Patients pay a nominal fee.

Some eye care services are free, and some are partly covered.

Others, specify:

#### 2.2.3 Health insurance

Is health insurance available in the country?

Yes No

If "Yes," indicate the proportion (in %) of the population covered by health insurance:

If the government is a provider of health insurance,

Indicate whether all citizens are eligible or if not, which categories of citizens are:

If **employers** are a provider of health insurance:

Are all employers required to provide health insurance?

Yes No

If "No," summarize the current practice:

Indicate whether all employees are entitled to be enrolled or if not, which categories of employees are:

Provide additional comments if necessary:

#### Regarding private health insurance companies:

Are there private health insurance companies with which citizens can make individual arrangements?

Yes No

#### Why might some people not be covered by health insurance?

The government and/or employers do not have health insurance schemes. Citizens must subscribe to insurance privately, and the cost is onerous for most.

Employers offer health insurance, but the cost to the employee is too high.

As health insurance is not compulsory, the least advantaged citizens may not subscribe.

Most eye care providers do not treat patients who have health insurance.

Others, specify:

### 2.2.4 Eye care services provided by the government

Specify the categories of services and medication that are mostly covered by the government:

All services provided in government eye care establishments Refraction examination and prescription of spectacles Provision of spectacles in a selected price range and of a specific type Comprehensive eye examination Stay at an eye inpatient department Eye care medication Retinal laser therapy for diabetic retinopathy Treatment against anti-vascular endothelial growth factor Glaucoma drops Glaucoma surgery Cataract surgery without intraocular lens Cataract surgery with intraocular lens Vitreo-retinal surgery Corneal transplantation (keratoplasty) Strabismus Retinopathy of prematurity Others, specify:

Indicate which eye care services are typically not covered by the government:

### 2.2.5 Eye care services provided by health insurance

# Which eye care services are typically covered, fully or in part, by health insurance?

All services Refraction examination and prescription of spectacles Provision of spectacles in a selected price range and of a specific type Comprehensive eye examination Stay at an eye inpatient department Eye care medication Retinal laser therapy for diabetic retinopathy Treatment against anti-vascular endothelial growth factor Glaucoma drops Glaucoma surgery Cataract surgery without intraocular lens Cataract surgery with intraocular lens Vitreo-retinal surgery Corneal transplantation (keratoplasty) Strabismus Retinopathy of prematurity Others, specify:

Indicate which eye care services are typically **not covered** by health insurance:

## 2.2.6 Cataract surgery

What is the **average cost of cataract surgery** (in US\$ or indicate the currency used) performed by the following providers?

Cataract surgery provider Cost	Government eye care services	Private practice	Non-state actors
Cost of cataract surgery to the patient (in US\$)			

Are there options for low-income citizens to receive surgery for free or at minimal cost?

Yes. Give details of who provides the surgery and who is eligible:

No

2.2.7 Has a cost–benefit analysis been conducted of services for prevention of avoidable visual impairment and rehabilitation services?

Yes No

If "Yes", provide references:

Provide information on any studies on this subject, specifically those that influenced policy or highlevel decision-making in the area of eye care, including rehabilitation.

#### 2.2.8 Additional information on health financing:

## 2.3 Eye care workforce

#### 2.3.1 Eye care professionals

Define the following eye care professionals according to government criteria:

#### Ophthalmologist:

For ophthalmologists, indicate the number of years of postgraduate training after completion of a medical degree:

Definitions of professional groups are usually based on the minimal education and examinations required to obtain a licence to practise the profession.

More on: http://www.ilo.org/ public/english/bureau/stat/ isco/index.htm, http://www. ilo.org/public/english/bureau/ stat/isco/isco88/2221.htm and http://www.ilo.org/public/ english/bureau/stat/isco/ isco88/3224.htm

Optometrist:

For optometrists, indicate the type and length of training:

Optician:

For opticians, indicate the type and length of training:

Certified ophthalmic nurse:

For certified ophthalmic nurses, indicate the type and length of training:

If such government endorsed definitions do not exist, indicate the definitions that are in use and the institution(s) that defined them:

# 2.3.2 National government plans or strategies for the development of human resources for eye care

Are there government plans or strategies for the development of human resources for health care?

Yes No

If "Yes", provide references or websites:

The areas referred to in this section are usually addressed in publically available government documents.



Do the plans or strategies include human resources for eye care?

Yes No

If "Yes," indicate in the options and implementation status:

Plans or strategies have been prepared and are fully implemented. List reports, references and websites:

Plans or strategies have been prepared but are not sufficiently implemented. Give the reasons:

Plans or strategies have been only partly prepared. Give the reasons:

If "No", give the reasons:

The areas referred to in this

in publically available

government documents.

section are usually addressed

## 2.3.3 Educational institutions for eye care professionals

Indicate the number of eye care professionals who graduate each year. If possible, indicate the percentage per type of training institution.

**Type of training Total number** Government **Private** Others institution institutions Institutions per year (%) (%) (%) Specify Professional group Ophthalmologists Optometrists Ophthalmic nurses Opticians

Is data sourced (provide references) or estimated by the respondent?

## 2.3.4 Are eye care training institutions involved in preparing government strategies and plans for the eye health workforce?

Yes No

If "Yes", provide details:

## 2.3.5 Even distribution and retention of eye care professionals

Does the government take measures to ensure **even distribution** of professionals in all geographical areas?

Yes No

If "Yes", provide details:

Are there governmental measures in place to secure **retention of the professionals** in the country?

Yes No

If "Yes", provide details:

#### 2.3.6 Reporting systems on human resources for eye care

Select from the options below those that best describe the situation:

There is a well-managed, national, government-endorsed information system on all health care professionals.

The most comprehensive information on human resources in eye care is from professional organizations (e.g. national society of ophthalmology, chamber of commerce). Provide details: There is no readily available, reliable information on eye care professionals at national level from any source.

Others (specify):

## 2.3.7 Ophthalmologists practising in the country

What is the total number of ophthalmologists?

What is the total number of ophthalmologists by sector?

	Government	Private	Other, such as nongovernmental organizations
Ophthalmologists			

Is data sourced (provide references and date of collection) or estimated by the respondent?

1. In some countries, ophthalmologists practise in all sectors (e.g. government, private). To avoid counting individuals several times, include only the sector of their principle practice (e.g. government, private).

2. More information on eye care professional groups is available in Appendix 4, WHA66.4 Universal eye health: a global action plan 2014–2019.

3. Specify gender if the information is available.

#### What is the total number of ophthalmologists by subspecialty?

	Government	Private	Other, such as nongovernmental organizations
General ophthalmologists			
Cataract and corneal surgeons			
Retinal surgeons			
Paediatric ophthalmologists			

Is data sourced (provide references and date of collection) or estimated by the respondent?

### 2.3.8 Optometrists practising in the country

What is the total number of optometrists?

Total number of optometrists by sector

	Government	Private	Other, such as nongovernmental organizations
Optometrists (total number)			

Is data sourced (provide references and date of collection) or estimated by the respondent?

1. In some countries, optometrists practise in several sectors. To avoid counting individuals several times, include only the sector of their principle practice.

2. More information on eye care professional groups is available in Appendix 4, WHA66.4 Universal eye health: a global action plan 2014–2019.

3. Specify gender if the information is available.

1. In some countries,

-					individuals practise in several
Professional group	Total	Government	Private	Other, such as nongovernmental organizations	sectors. To avoid counting individuals several times, include only the sector of thei principle practice.
Opticians					2. More information on eye care professional groups is available in Appendix 4,
Ophthalmic nurses					WHA66.4 Universal eye health: a global action plan 2014–2019. 3. Specify gender, if the
Orthoptists					information is available.
Ophthalmic and optometric assistants					
Ophthalmic and optometric technicians					
Vision therapists					
Ocularists					
Ophthalmic photographers and imagers					
Ophthalmic administrators					

## 2.3.9 Allied ophthalmic personnel practising in the country



Specify if there are any other allied ophthalmic personnel and the number by sector:

Is data sourced (provide references and date of collection) or estimated by the respondent?

## 2.3.10 Is the profession "cataract surgeon" defined and accepted by the government?

Yes. Provide information on the training curriculum, the estimated number in the country and the types of cataract surgery they usually perform: In countries with insufficient eye care providers, "cataract surgeons" are trained specifically to operate cataracts. They are not certified ophthalmologists, and their educational background varies.

#### No

#### 2.3.11 National teaching curricula

#### **Regarding national curricula:**

The national curricula are compulsory and used by all educational institutions.

The national curricula are optional and used by some educational institutions.

There are no national curricula; educational institutions develop their own.

Do national curricula exist for:

Ophthalmologists. Give reference:

The areas referred to in this section are usually addressed in government documents.

Optometrists. Give reference:

Opticians. Give reference:

Ophthalmic nurses. Give reference:

Others, specify:

### 2.3.12 Are there government bodies for national accreditation of the educational institutions for ophthalmologists, optometrists, opticians and ophthalmic nurses?

Yes, for all Yes, for some No

For each cadre, specify whether government bodies for national accreditation exist and provide information and references:

Professional group	Yes or No
Ophthalmologists	
Optometrists	



Professional group	Yes or No
Ophthalmic nurses	
Opticians	

Provide information and references on government bodies for national accreditation for other ophthalmic occupations:

Is data sourced (provide sources) or estimated by the respondent?

# 2.3.13 Is there compulsory continuing medical education in eye care?

Yes, for all Yes, for some No

For each cadre, specify whether government bodies for compulsory continuing medical education exist and provide information and references:

Professional group	Yes or No
Ophthalmologists	
Optometrists	

For additional space, use pages 98–100.

Professional group	Yes or No
Ophthalmic nurses	
Opticians	

Provide information and references on compulsory continuing medical education for other ophthalmic occupations:

Is data sourced (provide sources) or estimated by the respondent?

## 2.3.14 Trends in the workforce of ophthalmologists

Select the options below that best describe the current situation:

There are sufficient ophthalmologists in the country: everyone in the country, in all locations, has access to a general ophthalmologist and to the ophthalmic subspecialties.

Indicate the reasons:

There are sufficient domestic medical graduates, and training for subspecialties is available.

Numerous ophthalmologists from other countries compensate for services that are lacking domestically.

Others:



The number of general ophthalmologists is sufficient, but subspecialty care is not sufficient.

Indicate reasons:

There is limited training available in the country for eye care subspecialties.

Ophthalmologists who are specialized tend to leave the country to work abroad.

Others:

The number of ophthalmologists is insufficient: not everyone in the country can access eye care

Indicate the reasons:

Medical schools have insufficient capacity.

Not enough medical school graduates are interested in specializing in ophthalmology.

Not enough educational institutions offer specialization in ophthalmology.

Ophthalmologists tend to leave the country to work abroad.

Ophthalmologists tend to stay in large urban areas, and communities in the remainder of the country are underserved.

Others:

The number of ophthalmologists is decreasing, and access to eye care is at serious risk.

#### Indicate the reasons:

Medical schools have insufficient capacity.

Medical school graduates are not interested in specializing in ophthalmology.

Ophthalmologists tend to leave the country to work abroad.

Others:

For additional space, use pages 98–100.

2.3.15 Have case studies been conducted on development of human resources for eye care in the country (e.g. on distribution, retention strategies, subspecialty training)?	
Yes No	
If "Yes," give information on any studies on this topic, especially if the results influenced policy or high-level decision-making in the area of eye care, including rehabilitation.	
2.3.16 Additional comments on the eye care workforce:	

## 2.4 Eye care service provision

#### 2.4.1 Access to eye care services

Select the options below that best describe the current situation in the country, and give the sources of information (e.g. reports, publications):

Comprehensive eye care services are available and affordable in all parts of the country; they are provided free by the government or paid by health insurance schemes.

Comprehensive eye care services are available in most urban and rural areas, but their cost may be a barrier for some patients.

Comprehensive eye care services are available in large urban areas; the costs are partly paid by patients. Populations in rural areas have difficulty in accessing services because of cost and/or transportation.

Eye care services can be accessed in only a few large urban areas and only to those who can pay.

Others (specify) :

#### Are there any tertiary eye care establishments in the country?

Yes No

If "Yes," provide the number of centres and in which cities or areas they are located:

1. Tertiary eye services should have all subspecialty eye care services, including advanced diagnosis and medical and surgical treatment for both children and adults. Facilities for sophisticated eye care are often available in university hospitals or similar institutions.

2. According to WHO, patientcentred care is care focused on the individual seeking care (the patient). People-centred care encompasses clinical encounters, the health of people in their communities and their crucial role in shaping health policy and health services. Describe any studies on this subject, specifically those that influenced policy-making or high-level decision-making in the area of eye care, including rehabilitation.

To compensate for shortages of specialized eye care services, are any **innovative approaches** used, such as telemedicine, mobile clinics, outreach programmes, mobile phones?

Yes No

If "Yes", provide details:

Is **patient-centred eye care** (e.g. diabetic centres providing multidisciplinary health services, including eye services) supported and promoted by the government through health strategies or policies?

Yes No

If "Yes," are there any documented examples of best practice in the country? Give reference:

## 2.4.2 Cataract

What is the **total number of cataract operations** performed in the past calendar year in the whole country?

Year applicable to:

Number of **cataract operations** performed in the past calendar year in the whole country by each provider

Eye care provider	Number of cataract operations in the past calendar year (Disaggregate by gender if information available)
Government facilities	
Private facilities	
Non-state actors	
Other (specify)	

Is data sourced (provide sources and date of collection) or estimated by the respondent?

#### Cataract surgical rate:

Year applicable to:

Source of population number:

For additional space, use pages 98–100.

1. More information on indicators of cataract surgery rates is given in Appendix 4, WHA66.4 Universal eye health: a global action plan 2014–2019. Disaggregate by gender, if the information is available.

2. The cataract surgical rate is the number of cataract operations performed per year per 1 million population. It can be calculated annually at national or subnational level. The rate can be used to set national targets for cataract surgery service. It is also a widely used proxy indicator for general eye care service. For the latest population data, use the most recent census data or the United Nations estimate, and indicate the year to which the figure applies.

Estimates can be obtained from the United Nations Department of Economic and Social Affairs website: http://esa.un.org/ unpd/wpp/unpp/panel\_ population.htm (if the information is available, provide disaggregated data)

#### Cataract surgical coverage:

Year applicable to:

Reference to the prevalence survey used for calculation:

(if the information is available, provide disaggregated data)

Select the options below that best describe the current situation.

Cataract surgery services cover the needs in the country and are affordable for all.

Cataract surgery services are available everywhere, but their cost is a barrier for some.

Cataract surgery services are available only in large urban areas, and their cost is a barrier for some.

Cataract surgery services are insufficient in all areas; they are available only to the few patients who can afford them.

Others, specify:

For additional space, use pages 98–100.

3. Cataract surgical coverage is calculated to assess the degree to which cataract surgical services are meeting the need. It is defined as the 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). Calculation must use data from methodologically sound and representative prevalence surveys. Cataract surgical coverage is among the coverage indicators to track universal health coverage:

http://www.who.int/healthinfo/ universal\_health\_coverage/ report/2015/en/



Indicate the average **waiting list time** period to receive cataract surgery (range of days):

Government facilities: days

Private facilities: days

Others, specify:

Regarding implantation of an **intraocular lens**, select the options below that best describe the current situation:

An intraocular lens is implanted during most operations at no additional cost to the patient.

An intraocular lens is implanted during most operations, but the patients must pay all or part of the cost.

An intraocular lens is implanted only if the patient pays for it.

Intraocular lenses are implanted rarely because they are not available or surgeons are not trained (specify):

Others, specify:

#### Is the quality of cataract surgery services monitored?

Yes No

If "Yes", at what level:

National

District

Institution

Individual surgeon

Describe how the quality of cataract surgery services are monitored at the levels you have selected:

No. Indicate why:

Do cataract surgeries performed in the country include a hospital stay (in-patient surgery)?

Yes No

If "Yes," indicate the estimated percentage of such operations and the average number of days patients are hospitalized:

Indicate any recognized gaps in the provision of cataract surgery service or in the uptake of the services by patients. Provide details:

## 2.4.3 Refractive services

What is the typical waiting list time period to see an eye care professional for a prescription for glasses? (e.g. same day or specify number of days)

General ophthalmologists:

Optometrists:

What is the average cost for basic good-quality prescription glasses inclusive of lenses and frames? (in US\$ or indicate the currency used):

What is the interval for eligibility to receive new prescription glasses covered by health insurance or government funding (in years)?

Children: years

Adults: years

Indicate any gaps in the provision of refractive service or in the uptake of the services by patients. Provide details:

THE

Is retinal laser therapy available in the country?

Yes No

If "Yes," how many retinal lasers are available?



Is the retinal laser therapy:

Fully or partially covered by government funding or health insurance

Paid by patients

If patients have to pay, what is the cost of a regular laser retina? photocoagulation session (in US\$ or indicate the currency used):

Indicate the estimated prevalence of blindness and visual impairment due to diabetic retinopathy in the country, and give the source of information.

Describe any recognized needs in the prevention and treatment of diabetic retinopathy in the country:

## 2.4.5 Glaucoma

Are there national guidelines or programmes for detecting and treating glaucoma?

Yes No

If "Yes", give reference:

Is perimeter visual field examination adequately available and accessible in the country?

Yes No

Are the following glaucoma treatment options adequately available in the country?

eye drops

laser procedures

filtering microsurgery

Regarding eye drops, this treatment option is:

Fully or partially covered by government funding or health insurance:

Paid by patients

Regarding laser procedures, this treatment option is:

Fully or partially covered by government funding or health insurance:

Paid by patients

Regarding filtering microsurgery, this treatment option is:

Fully or partially covered by government funding or health insurance:

Paid by patients



How many glaucoma laser procedures were performed in the country during the past calendar year?

Year: Number of procedures:

(If the information is available, disaggregate by type of procedure and gender.)

How many glaucoma filtering microsurgeries were performed in the country during the past calendar year?

Year: Number of procedures:

(If the information is available, disaggregate by type of procedure and gender.)

Indicate the estimated prevalence of blindness and visual impairment due to glaucoma in the country and the source of information:

Describe any recognized needs in the prevention of vision loss and treatment of glaucoma in the country:

## 2.4.6 Age-related macular degeneration

Are there national clinical guidelines for the detection and treatment of agerelated macular degeneration?

Yes No

If "Yes", give reference:

Are there specialized tertiary eye care centres for management of age-related macular degeneration?

Yes No

If "Yes", list their locations:



Is medication to treat selected forms of age-related macular degeneration (e.g. ranibizumab, bevacizumab):

fully or partially covered by government funding or health insurance

paid by patients

If patients have to pay, report the cost (in US\$ or indicate the currency used):

Indicate the estimated prevalence of blindness and visual impairment due to agerelated macular degeneration in the country and the source of the information:

Describe any recognized needs in the prevention and treatment of age-related macular degeneration in the country:

### 2.4.7 Paediatric eye care services

Are all newborn infants given routine examinations for congenital and other eye conditions? These do not necessarily require eye care professionals, as the examinations can be done by obstetricians, neonatologists or midwives.

Yes No

Are there guidelines for routine eye examinations of newborn infants? These do not necessarily require eye care professionals, as the examinations can be done by obstetricians, neonatologists or midwives.

Yes No

If "Yes," cite a reference to the guidelines used:

Indicate any recognized needs in the provision of eye care service for newborn infants or in the uptake of the services. Give details:



Are there national guidelines for screening and management of retinopathy of prematurity?

Yes No

If "Yes," cite a reference to the guidelines used:

Are all premature infants screened for retinopathy of prematurity?

Yes No

Is there sufficient capacity in the country to provide early treatment of retinopathy of prematurity?

Yes No

Are there specialized tertiary eye care centres for management of retinopathy of prematurity?

Yes No

If "Yes", list their locations:

Are the services (screening and treatment) affordable?

Yes, fully or partially covered by governmental funding and/or health insurance

No

If no, provide details on the cost for patients (in US\$ or indicate the currency used):

Indicate the estimated prevalence of blindness and visual impairment caused by retinopathy of prematurity in the country and provide the source of information:

Is screening for eye conditions in pre-school and school conducted in the country?

Yes No

Are there guidelines for routine, periodic eye examinations for children?

Yes No

If "Yes," cite a reference to the guidelines used:

Indicate any recognized needs in the provision of paediatric eye care or in the uptake of the services. Give details:

### 2.4.8 Other subspecialties in eye care

Which other subspecialties are available in the country?

Cornea and anterior segment

Vitreoretinal

Uveitis or intraocular inflammation

Tumours

Oculoplasty

Neurophthalmology

Others, specify:

Is there one or more cornea bank in the country?

Yes No

In endemic countries, the WHO-recommended SAFE strategy is used, consisting of: surgery to treat the blinding stage of the disease (trachomatous trichiasis), antibiotics to treat infection, facial cleanliness and environmental improvement, particularly improving access to water and sanitation. http:// www.who.int/mediacentre/ factsheets/fs382/en/ If "Yes", list their locations:

Are there any government or other legal requirements for donation and use of corneal tissue?

Yes No

If "Yes", provide details:

Are there sufficient corneal grafts to cover the needs?

Yes No

If "No," give details of how the needs are met:

Select from the options below those that best describe the situation:

Fully or partly covered by governmental funding or health insurance

Paid by patients who can afford it

Others, specify:

If patients have to pay, report the cost (in US\$ or indicate the currency used):

Describe whether the availability and quality of cornea grafts should be improved:

Is there evidence of trachoma in the country?

Yes No

If "Yes," is the country implementing the SAFE strategy?

Yes No

Indicate which subspecialty services are insufficiently available:

## 2.4.9 Low-vision and rehabilitation services

#### Are low-vision services available in the country?

Yes No

If "Yes", indicate the number and location of low-vision centres in the country:

Are there referral and communication systems between eye care professionals and others (e.g. schools, general practitioners) for the provision of low-vision aids?

Yes No

For additional space, use pages 98-100.

Low-vision services are for people who have residual vision that can be used and enhanced by aids, making them fully functional. The term "low vision" as used here must not be confused with the WHO definitions of moderate and severe visual impairment.





any ophthalmologist

an ophthalmologist specialized or licenced in low-vision services (authorized by e.g. the Ministry of Health, health insurance companies)

others (specify) :

Are low-vision devices for use with computers available in the country?

Yes No

Who covers the costs of low-vision services?

Government

Health insurance

Non-state actors

Patients

Other, provide details:

## Are rehabilitation services for blind and visually impaired people available in the country?

Yes No

If "Yes", indicate the number and location of rehabilitation centres in the country:

Are there referral and communication systems between eye care professionals and others (e.g. schools, general practitioners) and for the provision of rehabilitation services?

Yes No

Who covers the costs of low-vision services?

Government

Health insurance

Non-state actors

Patients

Other, provide details:

Regarding the provision of low-vision and rehabilitation services, indicate the share of services by government, private sector and non-state actors:

	Government (%)	Private (%)	Non-state actors (%)
Low-vision services			
Rehabilitation services			

Indicate the available schooling for blind and visually impaired children:

blind and visually impaired children can be enrolled only in schools for the blind

there are no schools for the blind, visually impaired children are fully integrated into regular schools

visually impaired children can attend either schools for the blind or are integrated in regular schools



Other, provide details:

Give the percentage of attendance to schools for the blind and regular schools and state who determines which type of the school a child will attend:

2.4.10 Additional comments on eye care service provision:

## 2.5 Essential medicines, medical products and technologies for eye care

2.5.1 List of essential medicines, medical products and technologies for eye care issued by the Ministry of Health	
Is there a list of essential medicines, medical products and technologies for eye care issued by the Ministry of Health?	
Yes. Provide references or websites:	
No.	
If "Yes," is there supporting government policy to ensure rational use of the essential medicines, medical products and technologies?	
If "No," do other government institutions in the country have information on essential medicines for eye care? (skip to 2.5.4)	
Yes No	
2.5.2 Updating of the list of essential medicines, medical products and technologies for eye care	
products and technologies for eye care	
products and technologies for eye care How often is the list updated?	
products and technologies for eye care	
products and technologies for eye care How often is the list updated?	
products and technologies for eye care How often is the list updated?	

The list is updated by an independent panel of experts coordinated by a government institution

The list is updated by the Ministry of Health



Other (specify):

## 2.5.3 Is the list of essential medicines for eye care used to improve universal provision of eye care services?

Yes No

Specify and provide details:

Select the options (single or multiple) that best describe the current situation:

The medicines on the list must be available in eye care provider establishments and in pharmacies at all times.

The eye care medicines on the list are provided by pharmacies free of charge to patients with a physician's prescription.

The eye care medicines on the list are provided free of charge to patients during hospitalization.

The eye care medicines on the list are not provided for free, but the medicines are fully reimbursed for patients with health insurance.

The eye care medicines on the list are paid by patients.

Other (specify):

William,

2.5.4 Which government institutions negotiate and monitor procurement prices for eye medicines and approve their domestic use?	
2.5.5 Can imported medicines, medical products and technologies be used without approval by the government? Give details:	
Yes No	
2.5.6 Do domestic companies produce eye medicines, medical products or technologies? Give details:	
Yes No	

Time.

2.5.7 Are there best practices and case studies for ensuring equitable access to essential medicines for eye care in the country? Give details:	
Yes No	
2.5.8 Are there plans to improve equitable access to essential medicines, medical products and technologies for eye care? (i.e. what should be done and by whom?) Give details:	
Yes No	
2.5.9 Additional comments on essential medicines, medical products and technologies for eye care:	
,	

#### 2.6 Health information system

### 2.6.1 Are selected health data and information collected and centrally administered in the country?

Yes No

If "Yes", provide references or websites:

Which institution(s) operate the national health information system or other mechanism for collecting national health data and information?

If "No," indicate whether there is another mechanism to collect health-related data and information in the country (skip to 2.6.6):

For additional space, use pages 98-100.

Periodic reports on data and information collected through the national health information system are usually available to the public. 2.6.2 How do the authorities decide which health data and Understanding how decisions are made about which data are information will be collected centrally in the country? to be collected and how allows exploration of opportunities for collecting information on eye health. Understanding which 2.6.3 What is the source? categories of eye care establishment collect data and Specify and provide details: information avoids bias. All registered eye care establishments in the country (includes all those listed below) Or select from those listed below: Government eye care establishments Private eye care establishments Eye care establishments run by national or international nongovernmental organizations Information can be obtained from professional eye care associations and societies Information can be obtained from health insurance companies Others, specify: 2.6.4 Are the centrally collected data and information on eye care and eye health in the country disaggregated by the following? Check all the appropriate boxes: Sex Age District or other administrative unit Reporting eye care establishment For additional space, use pages 98–100.

Others, specify:

Data on eye care and eye health are not disaggregated.

2.6.5 Is the compliance of the people who provide information monitored?

Yes No

If "Yes", by what mechanism?

#### 2.6.6 National or district health surveys

Was any survey conducted within the past 5 years, and were questions on eye care and eye health included?

Yes. List the questions and provide references or websites:

2.6.7 Were any questions on eye health included in the national census questionnaire? Yes. List the questions and provide references or websites:	If there is no section on visual impairment in the national census questionnaire, one may be included among the questions on disability.
No	
2.6.8 Which eye conditions are included in periodic district or national disease surveillance?	Disease surveillance may cover trachoma, eye complications in HIV/AIDS, neonatal ophthalmia, some external eye infections, inflammatory conditions and retinopathy of prematurity.
2.6.9 Do any other periodic reports include information on eye care and eye health? Yes. Give details:	For instance, summary health reports on newborn infants, school screening, reports on comprehensive health care for people with diabetes mellitus

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**2.6.10 Additional comments on the health information system and its eye care and eye health component:** 

## 3. Multisectoral engagement and partnerships

## 3.1 Engagement of the non-health sector in the preparation and implementation of policies and plans on eye health and the prevention of visual impairment

Are non-health sector representatives (e.g. ministry of finance, ministry of education) members of the national committee for eye health and the prevention of visual impairment?

Yes. Give details:

Give information on recent direct engagement of the nonhealth sector in implementation of eye health policies and the national plan for eye health and the prevention of visual impairment, e.g. building health care facilities, establishing comprehensive rehabilitation services and facilities.

No

Were non-health sector representatives involved in preparation of eye health policies?

Yes. Give details:

No

#### **3.2 Nongovernmental organizations**

List the main **nongovernmental organizations** that are actively engaged in **eye health and the prevention of visual impairment** in the country. Give details of their activities, agendas, reports of activities and a website:

National organizations:

International organizations:

## **3.3 National and international eye health partnerships and alliances**

Name the main international and national alliances and partnerships for eye health and the prevention of blindness. Give details of their activities, agendas, reports of activities and a website:

## **3.4 Does the corporate sector support eye health in the country?**

Yes. Give details:

No major involvement

3.5 Does the country have a national plan for poverty reduction or socioeconomic development?		
Yes	No	
If "Yes," does the plan include eye health or prevention of visual impairment?		
Yes	No	
	y in which areas (indicate whether eye health and the prevention irment are reflected and how) and provide references or websites:	
	ase studies on multisectoral engagement to promote then eye health in communities been conducted? No etails:	For example, setting and meeting requirements for buildings, road crossings, pavements, orientation signs in buildings to facilitate visually impaired people.

**3.7 Additional comments on multisectoral engagement and partnerships:** 

# 4. Summary of results, conclusions and the way forward

A thorough assessment of existing eye care services and the socioeconomic environment in which they are provided is essential for identifying gaps and needs. Various formats can be used to summarize the findings obtained with ECSAT, which can then be used to guide evidence-based interventions. The information obtained by completing ECSAT can be summarized in a narrative report or according to its modular structure. In most cases, it will not be possible to collect all the information requested in ECSAT; however, use of the tool should provide:

- all the information that could be collected and compiled; and
- information that was not available, including a summary of why it could not be obtained and suggestions for how to collect it.

The information obtained should be analysed either by the respondent or by entities with the authority to implement evidence-based interventions, such as a national eye health or prevention of blindness committee led by the ministry of health, or a similar coordinating mechanism.

Analysis of the ECSAT outcomes should assist in identifying the following:

- missing information that is strategically important for further research and to support evidence-based interventions;
- gaps in eye care service provision, structured according to the six areas of the WHO framework for strengthening health systems (ECSAT section 2); and
- gaps in evidence for advocacy, awareness creation and multisectoral engagement (ECSAT sections 1 and 3).

The template below is indicative; it could be used as a start for further analysis, identification of needs and proposed action. The result should be a sound background document for designing evidence-based strategies and interventions for national or district implementation of resolution WHA66.4 on the global eye health action plan and for continuing work to increase access to high-quality, comprehensive, integrated eye care.



1. Evidence for advocacy and creating awareness

Main gaps and requirements:

Missing data and information requiring further research and collection:

Proposed action:

2. Enhancing comprehensive eye care services through the WHO health system approach

2.1 Leadership and governance

Main gaps and requirements:



Missing data and information requiring further research and collection:

Proposed action:

THE

#### 2.3 Eye care workforce

Main gaps and requirements:

Missing data and information requiring further research and collection:



Proposed action:

**2.4 Eye care service provision** *Main gaps and requirements:* 

THE

Missing data and information requiring further research and collection:

Proposed action:



2.5 Eye care essential medicines, medical products and technologies *Main gaps and requirements:* 

Missing data and information requiring further research and collection:

Proposed action:

#### 2.6 Health information system

Main gaps and requirements:



Missing data and information requiring further research and collection:

Proposed action:

#### 3. Multisectoral engagement and partnerships

Main gaps and requirements:

Missing data and information requiring further research and collection:



Proposed action:

## Annex 1. Universal eye health: a global action plan, 2014–2019

In May 2013, the Sixty-sixth World Health Assembly adopted resolution WHA66.4, entitled "Towards universal eye health: a global action plan 2014–2019," which endorses "Universal eye health: a global action plan, 2014–2019,"<sup>2</sup> The aim of the global action plan is to sustain and expand work by WHO Member States, the WHO Secretariat and international partners to ensure universal eye health globally.

The **vision** of the global action plan is a world in which nobody is needlessly visually impaired, where those with unavoidable vision loss can achieve their full potential, and where there is universal access to comprehensive eye care services. Proposed actions for WHO Member States, the WHO Secretariat and international partners are structured around three objectives:

**Objective 1** is to gather evidence on the extent and causes of visual impairment and on eye care services and to use it to advocate for greater political and financial commitment by Member States to eye health.

**Objective 2** is to encourage the preparation and implementation of integrated national eye health policies, plans and programmes to improve eye health, in line with WHO's framework for strengthening health systems to improve health outcomes.

**Objective 3** is multisectoral engagement and effective partnerships to strengthen eye health.

There are indicators of deliverables for each objective and also three **core indicators**: the prevalence and causes of visual impairment; the number of eye care personnel; and cataract surgery as a proxy for the provision of eye care services.

The **global target** is a reduction of 25% in the prevalence of avoidable visual impairment by 2019, from the baseline of 2010.

<sup>2</sup> Universal eye health: a global action plan, 2014–2019. Geneva: World Health Organization; 2013. www.who. int/blindness/AP2014\_19\_English.pdf?ua=1.

# Annex 2. Securing support for eye health

Experience from countries that have comprehensive, integrated eye care services indicates the following stages:<sup>3</sup>

#### Phase 1. Preconditions for securing support for eye health

Stakeholders must recognize partners and agree on and pursue common goals, making the most of individual and collective efforts.

#### **Identifying partners**

Understanding what partners can and cannot do is essential for agreeing on roles and actions in policy development and for persuading decision-makers to commit themselves to the eye health agenda.

#### Collecting and using data

Policy-makers are more likely to set policies and allocate resources for implementation if the expected returns are clear. These should be based on systematic collection of data on the public health impact of eye diseases at national and district levels (e.g. incidence and prevalence of visual impairment and causes of visual impairment).

#### Phase 2. Entry points for securing support for eye health

Committees, permanent forums, round-tables and activity spheres constitute opportunities for engaging with individuals and organizations involved in policy development.

#### National committee for eye health and the prevention of blindness

When it is appropriate that such a committee be established, it should comprise representatives from all entities that contribute to preventing blindness and improving eye health in communities.

#### **Global and national partnerships**

Global initiatives for the prevention of blindness have been strengthened by joint agendas and approaches for improving eye health in communities. International stakeholders have increased their support for national activities in global programmes and tools.

<sup>3</sup> Investing in eye health: securing the support of decision-makers. Geneva: World Health Organization; 2012 (www.who.int/blindness/Politicalanalysis.pdf?ua=1).

#### Planning delivery of eye care services

Planning the provision of eye care should be based on evidence of community needs, lessons learnt and relevant international experience in preventing vision loss.

#### Phase 3. Ensuring accountability by monitoring

As many partners are often involved in delivering eye health services, the roles and responsibilities of each must be well understood. Ministries of health are more likely to provide financing when they are aware of exactly how external partners will support their efforts to improve eye health in the community. Clear accountability, with clear milestones and measures of input, output and impact, are important.

## Annex 3. Universal health coverage and health system approach

#### What is universal health coverage?

Universal health coverage is defined as access of all people to the health promotion, prevention, treatment and rehabilitation services they require, which are of sufficient quality to be effective, and that they do not suffer financial hardship in paying for these services.<sup>4</sup> Several factors must be in place for a community or country to achieve universal health coverage, including a strong, efficient, well-run health system that meets health priorities with people-centred, integrated care, the provision of affordable health services and access to essential medicines and techniques to diagnose and treat medical problems, in addition to sufficient well-trained, motivated health workers to provide the services on the basis of the best available evidence. The same applies to universally available, comprehensive eye care, integrated into national health systems. In the recent *World health report* entitled "Research for universal health coverage," WHO cited experience in its Member States and research on reaching the goal of universal health coverage.<sup>5</sup> Progress towards universal health coverage with interventions and financial risk protection, both with an equity dimension.<sup>6,7</sup>

#### What is a health system?

A health system consists of all the organizations, institutions, resources and people whose primary purpose is to improve health.<sup>8</sup> The health system delivers preventive, promotive, curative and rehabilitative interventions through a combination of public health and health care facilities, delivering health care by both state and non-state actors. The WHO framework structures health systems in terms of six core components or "building blocks": leadership and governance, financing, health workforce, service delivery, access

<sup>4</sup> What is universal health coverage? Geneva: World Health Organization; 2012 (www.who.int/features/qa/ universal\_health\_coverage/en/).

<sup>5</sup> The world health report 2013: Research for universal health coverage. Geneva: World Health Organization; 2013 (apps.who.int/iris/bitstream/10665/85761/2/9789240690837\_eng.pdf?ua=1).

<sup>6</sup> Monitoring progress towards universal health coverage at country and global levels: framework, measures and targets. Geneva: World Health Organization; 2014 (http://www.who.int/healthinfo/universal\_health\_coverage/en/).

<sup>7</sup> Tracking universal health coverage: first global monitoring report. Geneva: World Health Organization; 2015 (http://www.who.int/healthinfo/universal\_health\_coverage/report/2015/en/).

<sup>8</sup> Health systems. Geneva: World Health Organization; 2014 (http://www.who.int/healthsystems/topics/en/).

to essential medicines and health information systems.<sup>9,10</sup> Strengthening health systems involves strengthening each of these areas.

#### Leadership and governance

Governance in the health sector refers to a wide range of steering and rule-making functions performed by governments and other decision-makers to achieve national health objectives conducive to universal health coverage. National health policies, strategies and plans are essential for defining a country's vision, priorities, budgetary decisions and action for improving and maintaining the health of the population. Beyond the formal health system, governance involves collaborating with other sectors, including the private sector and civil society, to promote and maintain population health in a participatory, inclusive manner.<sup>11</sup> High-level policy- and decision-makers and also competent managers are essential for high-quality service delivery and for achieving the desired health outcomes.<sup>12</sup>

#### **Health financing**

The financing prerequisites for achieving universal health coverage are interrelated: raising funds for health; reducing financial barriers to access by prepayment and subsequent pooling of funds, in preference to direct out-of-pocket payment; and allocating or using funds efficiently and equitably.<sup>13</sup> The ways in which countries can raise sufficient funds to reduce their reliance on direct payments for financing services and to improve efficiency and equity are discussed in the *World health report 2010* "Health systems financing: the path to universal coverage".<sup>14</sup>

#### **Health workforce**

The health workforce can be defined as "all people engaged in actions whose primary intent is to enhance health." Many countries, however, lack the human resources necessary to deliver essential health interventions, for a number of reasons, including limited production capacity, migration of health workers within and out of countries, poor mix of skills and demographic imbalances. *The World health report 2006* included an assessment of the

<sup>9</sup> Key components of a well-functioning health system. Geneva: World Health Organization; 2013 (http:// www.who.int/healthsystems/publications/hss\_key/en/).

<sup>10</sup> Monitoring the building blocks of health systems: a handbook of indicators and their measurement strategies. Geneva: World Health Organization; 2010 (http://www.who.int/healthinfo/systems/monitoring/en/).

<sup>11</sup> Health system governance. Geneva: World Health Organization (http://www.who.int/healthsystems/topics/ stewardship/en/).

<sup>12</sup> Management for health services delivery. Geneva: World Health Organization (http://www.who.int/ management/strengthen/en/).

<sup>13</sup> Health systems financing. Geneva: World Health Organization (http://www.who.int/healthsystems/topics/ financing/en/).

<sup>14</sup> Health systems financing: the path to universal coverage. World health report 2010. Geneva: World Health Organization; 2010 (http://www.who.int/whr/2010/en/).

current crisis in the global health workforce.<sup>15</sup> To monitor and evaluate human resources for health, WHO suggested use of a standardized method.<sup>16,17</sup> To strengthen monitoring, health workforce observatories have been set up in the WHO regions.<sup>18</sup> Defining and classifying the health workforce precisely remains difficult but is essential for comparing information from different sources and countries and over time. While countries may differ, the professionals involved in eye care service delivery include ophthalmologists, optometrists and allied ophthalmic personnel (opticians, ophthalmic nurses, orthoptists, ophthalmic and optometric assistants, ophthalmic and optometric technicians, vision therapists, ocularists, ophthalmic photographers and imagers, and ophthalmic administrators).<sup>19</sup>

#### **Service delivery**

People-centred, integrated health services are essential for achieving universal health coverage. People-centred care is care that is focused and organized around the health needs and expectations of people and communities, rather than on diseases. Whereas patient-centred care is commonly understood as focusing on individuals seeking care (patients), people-centred care covers both clinical encounters and also the health of people in their communities and their crucial role in shaping health policy and health services. Integrated health services cover the management and delivery of high-quality, safe health services that ensure that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care through the different levels and sites of care within the health system, and according to their needs throughout the life course.<sup>20</sup>

#### Essential medicines, medical products and technologies

According to the WHO framework for health systems, a well-functioning health system ensures equitable access to essential medical products, vaccines and technologies of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound, cost-effective use.<sup>21</sup> Access has been defined as "having medicines continuously available and

<sup>15</sup> Working together for health. World health report 2006. Geneva: World Health Organization; 2006 (http:// www.who.int/whr/2006/whr06\_en.pdf).

<sup>16</sup> Handbook on monitoring and evaluation of human resources for health. Geneva: World Health Organization; 2009 (http://whqlibdoc.who.int/publications/2009/9789241547703\_eng.pdf).

<sup>17</sup> WHO country assessment tool on the uses and sources for human resources for health (HRH) data. Geneva: World Health Organization; 2013 (http://www.who.int/hrh/statistics/survey\_use\_source/en/).

<sup>18</sup> Regional observatories on human resources in health systems. Geneva: World Health Organization (http:// www.who.int/hrh/governance/en/).

<sup>19</sup> Universal eye health: a global action plan 2014–2019. Appendix 4: National indicators for prevention of avoidable blindness and visual impairment. Geneva: World Health Organization; 2013 (www.who.int/blindness/AP2014\_19\_English.pdf?ua=1).

<sup>20</sup> Health systems service delivery. Geneva: World Health Organization (http://www.who.int/healthsystems/ topics/delivery/en/).

<sup>21</sup> Everybody's business. Strengthening health systems to improve health outcomes. WHO's framework for action. Geneva: World Health Organization; 2007 (http://www.who.int/healthsystems/strategy/everybodys\_ business.pdf?ua=1).

affordable at public or private health facilities or medicine outlets that are within one hour's walk of the population.<sup>22</sup> Essential medicines are intended to be available in the context of functioning health systems at all times, in adequate amounts, in the appropriate dosages and of assured quality and at a price that individuals and the community can afford.<sup>23</sup> Full, affordable access of the population to high-quality essential medical products and treatment depends on: efficient regulation, provision and use of products; sound policies for selection, pricing and supply; a qualified health workforce; information systems; functioning health infrastructure; and good governance.<sup>24</sup>

#### Health information system

The primary aim of a health information system is to reflect the health situation and trends and allow assessment of health system performance, on the basis of data from a wide range of sources.<sup>25</sup> The key components of a health information system are: inputs (resources required to operate the system), processes (defined indicators, identified data sources and data management), outputs (for data transformed into information to guide health action), dissemination of health information and making it readily accessible. Health information systems serve multiple users and many purposes, which can be summarized as the generation of information to enable decision-makers at all levels of the health system to identify problems and needs, make evidence-based decisions on health policy and allocate scarce resources optimally.<sup>26,27</sup>

<sup>22</sup> Indicators for monitoring the Millennium Development Goals. New York City: United Nations (http://mdgs.un.org/unsd/mi/wiki/8-13-Proportion-of-population-with-access-to-affordable-essential-drugs-on-a-sustainable-basis.ashx?HL=of,population,and,affordable,the,that,medicines,continuously,available,at,public,or,private,health,facilities,medicine,outlets,are,within,one,hour,walk,having).

<sup>23</sup> Essential medicines. Geneva: World Health Organization (http://www.who.int/medicines/services/ essmedicines\_def/en/).

<sup>24</sup> Essential medicines and health products. Geneva: World Health Organization (http://www.who.int/medicines/ about/en/).

<sup>25</sup> Country health information systems: a review of the current situation and trends. Geneva: World Health Organization (http://www.who.int/healthinfo/country\_monitoring\_evaluation/documentation/en/).

<sup>26</sup> Health metrics network. Geneva: World Health Organization (http://www.healthmetricsnetwork.org).

<sup>27</sup> Monitoring, evaluation and review of national health strategies: a country-led platform for information and accountability. Geneva: World Health Organization; 2011 (http://www.who.int/healthinfo/ country\_monitoring\_evaluation/documentation/en/).



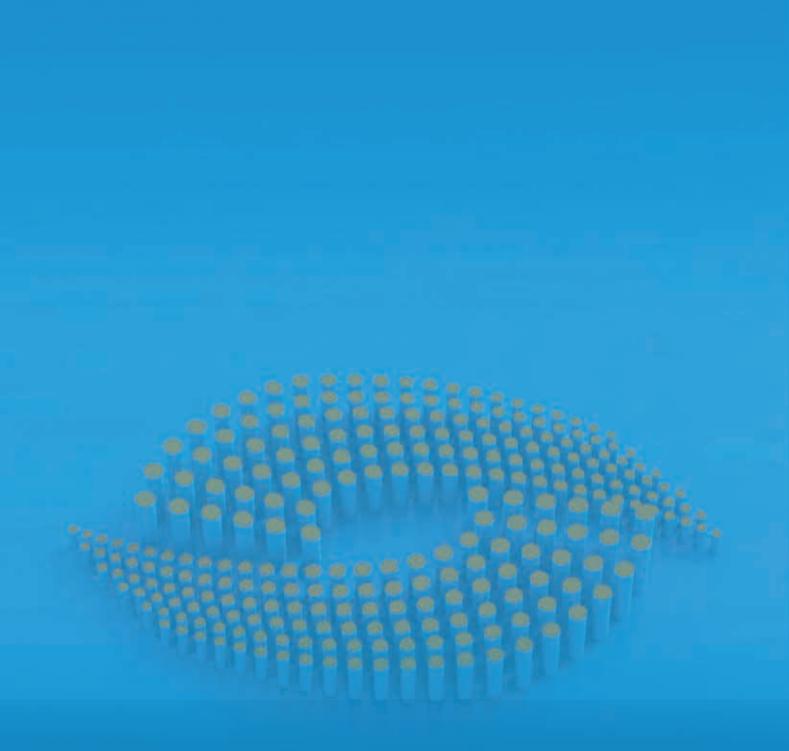
### Notes

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