EYE HEALTH SYSTEMS ASSESSMENT (EHSA): HOW TO CONNECT EYE CARE WITH THE GENERAL HEALTH SYSTEM

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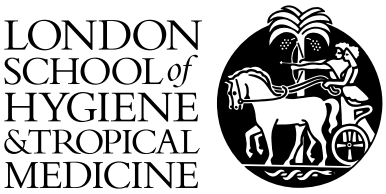

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Introduction

Between 2005 and 2007, USAID developed and tested the Health Systems Assessment (HSA) Approach, and produced a "How-To Manual" for a rapid assessment of a country's health system. The partners in this process were Health Systems 20/20, Partners for Health Reformplus, Rational Pharmaceutical Management Plus, and the Quality Assurance Project). The manual is available on http://www.healthsystems2020.org/content/ resource/detail/528). The HSA was updated in 2011. The impact of the HSA approach has been very positive: between 2007 and 2011, policymakers and program managers in more than 20 countries have produced reports (http://healthsystems2020.healthsystemsdatabase.org).

Over the last few years, increasing efforts have been invested in exploring the relationship between the eye health system and the general health system. A general consensus is emerging in the international eye care community that the effectiveness of eye care interventions can only be improved through better understanding of how health systems function. Encouraged by the success and relevance of HSA, a consortium of eye care experts and health experts, coordinated by the International Centre for Eye Health at the London School of Hygiene and Tropical Medicine, have developed the eye health assessment approach (EHSA) as an addendum to the HSA.

Understanding how eye care fits into the broader health system will benefit eye care programmes in three key ways (Blanchet and Lindfield 2010), by allowing programme managers and policy makers to:

1. have a greater impact on the health of the population.
2. develop services that support and improve clinical practice in eye care. Awareness of the wider support services that are necessary to provide a high quality clinical intervention helps identify the available resources and strengths of the existing system and complement them with innovations.
3. develop constructive collaborations with other health care providers, including mutual learning and sharing of resources, information and experiences for the benefit of both parties.

As an illustration, a new eye care intervention, such as the introduction of small incision cataract surgery (SICS), may produce unpredictable effects (either positive or negative) that affect the whole health system (SICS might lead to a dramatic increase in the number of patients seeking cataract surgery). The impact of any positive change in eye care could be maximised and of any negative change minimised by first assessing the capacities of the health system and then building on existing strengths. This assessment can be guided by the EHSA.

The objectives of EHSA are to:

- Enable national and international actors involved in eye care to assess a country's eye health system, in order to diagnose the relative strengths and weaknesses of the eye health system, to promote/allow/encourage/plan.
- Assist national eye health authorities and international organisations (i.e. non-governmental organisations and donors) to include eye health systems strengthening interventions in eye care programme design and implementation.

The EHSA Approach is designed to provide a rapid and yet comprehensive assessment of the key health systems functions and their interactions (World Health Organization 2007):

- Governance
- Health financing
- Health service delivery
- Human resources
- Medical products, vaccines, and technologies
- Health information systems

The EHSA approach was developed as a complement to the health system assessment approach. Therefore, it is highly recommended to conduct EHSAs in countries were a full HSA has been conducted. The output of the eye health system assessment should be twofold:

1. A country report presenting key findings for each eye health system function, critical cross-cutting eye health system weaknesses that limit performance, and recommendations for priority health systems interventions.
2. Consensus and ownership of the priorities and recommendations. This can be achieved through a stakeholder workshop which can also serve to validate the findings. Recommendations should reflect priorities and objectives of key stakeholders in eye care, and should serve as the basis for a work plan for health systems strengthening.

The EHSA how-to manual focuses on a list of selected indicators or questions used to measure the performance of the eye health system, and on possible sources of information where relevant information can be found.

Overview of the Modules

This manual takes modular form, with each module relating to a specific health system function, with the exception of the core module, which is designed to provide background information relevant to all the modules:

- The **core module** covers basic socio-demographic and economic information for the country and an overview of the eye health system and the general eye health situation of the country. It also covers the topic areas of political and macroeconomic environment, business environment and investment climate, major causes of mortality and morbidity, structure of the main government and private organizations involved in the eye health system, decentralization, service delivery organisation, donor mapping, and donor coordination.
- **Governance** addresses the capacity of the government to formulate policies and provide oversight for the eye health system, stakeholder participation and eye health system responsiveness, accountability, and regulation.
- **Financing** covers the collection of financial resources; the pooling and allocation of eye health funds, including government budget allocation and health insurance; and the process of purchasing and providing payments.
- **Service delivery** examines the factors that affect eye care service delivery outputs and outcomes, including demand for services, development of service packages, organization of the provider network (including private providers and community-based providers), and management of eye care services, including safety and quality, and the physical infrastructure and logistics of the system.
- **Eye Health workforce** covers systematic workforce planning, human resources policies and regulation, performance management, training/education, and incentives.
- **Medical products, vaccines, and technologies** evaluates the eye health system's pharmaceutical policy, laws, regulations; selection of pharmaceuticals; procurement, storage, and distribution; appropriate use and availability of pharmaceuticals; access to quality pharmaceutical products and services; and financing mechanisms for pharmaceuticals.
- **Health information** reviews the current operational eye health information system (EHIS) components; the resources, policies, and regulations supporting the HIS; data availability, collection, and quality; and analysis and use of health information for eye health systems management and policy making.

Core Module

The **core module** is used to understand the basic background information about the country and its eye health system. Ideally, this module is completed before the in-country assessment and is finalised with additional information in-country.

The core module is divided into two components. Component A provides a basic overview of a country's health status performance, through the analysis of internationally available data sources (e.g. WHO or IAPB websites). Component B requires the use of the assessment tool to conduct analyses of different topics (such as background information on the structure of the Ministry of Health, the main eye care providers and actors and donor involvement in eye health activities) that are essential to understand before analyzing the technical modules.

Core Module

	Key HSA indicators	EHSA Indicators
A. Diseases	Top causes of morbidity in the country	Prevalence of blindness (and other blinding diseases)
	TB Prevalence, all forms (per 100.000 population)	Proportion of blindness due to cataract
	Prevalence and death rates associated with malaria	Top causes of eye morbidity and blindness
	Prevalence of HIV, total (% of population age 15-49)	Number of cataract surgeries performed per 1,000,000 population annually
B. Health system profile and background characteristics	Structure of main ministries and private organizations involved in the health care system	Structure of the main ministries and organisations involved in eye health care system
	Service Delivery Organization	Eye care service delivery organisation
	Donor Mapping	Eye care donor mapping
	Donor Coordination	Eye care donor coordination

Governance Function

Governance in health systems entails developing and putting in place effective guiding rules for policies, programs, and activities related to achieving health sector objectives. Health governance involves three sets of actors. The first are state actors, which includes politicians, policy-makers, and other government officials (e.g. National Eye Care Unit, University Department, Medical and Nursing schools, optometry schools). Actors in the public eye care sector are central, such as the health ministry, health and social insurance agencies, and public pharmaceutical procurement and distribution entities. However, other public sector actors beyond the health sector can have roles as well. These can include, for example, parliamentary health committees, regulatory bodies, the ministry of finance, various oversight and accountability entities, and the judicial system.

The second set of actors constitutes eye care service providers (e.g. ophthalmologists, ophthalmic nurses, optical centres, community eye health volunteers). Depending upon the particulars of a given country's health system, this set mixes public, private, and voluntary sector providers. The provider category also includes organisations that support service provision:

- insurance agencies,
- the pharmaceutical industry, and
- equipment manufacturers and suppliers.

The third set of actors contains beneficiaries, service users, and the general public. This set can be categorized in a variety of ways: for example, by income (poor vs. non-poor), by age (children, adult, elderly people), by location (rural vs. urban), by service (eye care service, optical centre, outreach services, facility-based services), by disease or condition (cataract, trachoma, glaucoma, refractive errors, etc.) or by cultural beliefs (allegiance to particular values and customs).

A fourth set of actors include international actors (e.g. IAPB, WHO, NGOs and donors).

A general consensus exists about what eye health systems should achieve:

1. improvements in eye health status through more equitable access and availability to quality eye care services, including preventive and promotion programs,
2. patient and public satisfaction with the eye health system, and
3. fair financing that protects against financial risks for those needing eye care.

Governance Function

	Key HSA indicators	EHSA Indicators
A. Government Responsiveness	Government and health provider organizations regularly solicit input from the public and concerned stakeholders (vulnerable groups, groups with a particular health issue, etc.) about priorities, services, and resources. The government is responsive to external stakeholder input.	Do stakeholder groups include representatives from disabled people's organisations (DPOs) or specific disease associations (e.g. diabetes associations)?
B. Voice: Preference Aggregation	The public and concerned stakeholders have the capacity and opportunity to advocate for health issues important to them and to participate effectively with public officials in the establishment of policies, plans, and budgets for health services.	Have DPOs, specific disease associations and other groups relevant to eye care the capacity and opportunity to advocate for eye health issues? What kind of actions was initiated?
		The DPOs, specific disease associations and other groups relevant to eye care have the capacity and opportunity to use, analyse and feedback to government on health sector goals, planning, budgeting, expenditure and data related to eye health

	Key HSA indicators	EHSA Indicators
C. Client Power: Technical Input and Oversight	Civil society organizations (including professional organizations, specialized health related NGOs, and the media) oversee health providers and provider organizations in the way they deliver and finance health services, follow protocols, standards, and codes of conduct in regard to medical malpractice, unfair pricing patterns, discrimination against clients, etc.	Do these civil society organisations include National Ophthalmic Societies and Disabled People's Organisations?
D. Service Delivery	Information about the quality and cost of health services is publicly available to help clients select their health providers or health facilities	Does information about the quality and cost of health care include information related to eye care? What kind of information exists about the quality and cost of eye care services?
E. Information, reporting, and lobbying	Service providers report information, including financing, surveillance, and program data, to government that can be used to monitor health system performance	Do health authorities' reports include information related to eye care? What kind of information is reported to the Ministry of Health?
	Service providers use evidence on program results, patient satisfaction, and other health related information to lobby government officials for policy, program, and/or procedural changes	Is evidence on results from eye care programmes (and other health related information) used by general health service providers and eye care service providers to lobby government? Is this information used by the Ministry of Health for planning and policy?
F. Compact: Directives, oversight and resources	Health sector regulations (protocols, standards, codes of conduct, and certification procedures) are known and enforced in training institutions and health facilities	Are these health sector regulations applied to eye care? Which of these regulations are not used in eye care? And Why?

Health Financing

Health financing is the backbone of the eye health system, and is a critical component to ensuring that eye care services are provided in an equitable, efficient, and sustainable manner. Health financing serves as the anchor for implementing and sustaining eye care programmes, and fostering service delivery. The World Health Organization (WHO) defines health financing as the "function of a health system concerned with the mobilization, accumulation and allocation of money to cover the health needs of the people, individually and collectively, in the health system" (World Health Organisation 2000).

Health financing consists of three broad components: revenue collection, pooling and allocation of financial resources, and purchasing and provider payment. The following table provides the suggested indicators, data collection questions, and level of data source for each of these components.

Health Financing

	Key HSA indicators	EHSA Indicators
A. Revenue Collection: amount and sources of financial resources	Public (government) spending on health as % of total health expenditure	Public (government) spending on eye health as % of total health expenditure
	Donor spending on health as % of total health spending	Donor spending as % of total eye health spending
B. Pooling and allocation of financial resources: Government budget formulation and allocation	Central and local councils budget allocations for health in decentralized systems	Central and local council budget allocations for eye health in decentralised systems
	Percent of government health budget spent on outpatient/inpatient care	Percent of government health budget on outpatient/inpatient eye care
C. Pooling and allocation of financial resources: Health Insurance	Services covered by health insurance	List of eye health services covered by health insurance
D. User Fees	Allocation of user fee revenues	User fee revenue generated from eye care ring-fenced for eye health at facility and district level
	Informal user fees in the public sector	Informal user fees for eye care-related activities (i.e. spectacles) in the public sector
		Are school screenings free of charge for families? Who funds this activity?
		Do eye health facilities have the same tariff? Are there differences between the private and the public sector in terms of price?

Eye Care Service Delivery

Eye Care Service Delivery involves the provision of required amenities to the general public by designated providers. The World Health Organization (WHO) defines service delivery as the way inputs are combined to allow the delivery of a series of interventions or health actions. This module presents dynamics of the organization of eye care service delivery, quality assurance and level of care. The Components, Indicators, and Questions were modelled from the Health Systems Approach Tool: A How-To Manual. Eye Care Service Delivery consists of the following Components: Availability of Service Delivery, Access, Coverage, Utilization, and Outcomes and the national level, and Availability of Service Delivery, Access, Organization, Quality Assurance of Care, and Community Participation at the sub-national level. Each component is characterized by one or more performance indicators show in the table below.

Service Delivery

	Key HSA indicators	EHSA Indicators
A. Availability of Service Delivery	Number of Hospital beds (per 10,000 population)	Proportion of hospital beds allocated to eye care
B. Service delivery Access, Coverage, and Utilization	Percentage of births attended to by skilled health personnel per year	Cataract surgical rate (country and different provinces or regions)
C. Service Delivery Outcomes	Life expectancy at birth, total (years)	Blindness prevalence
		Uncorrected refractive errors
D. Availability of Service Delivery (Coverage)	Number of primary care facilities in health system per 10,000 population	Number of primary care facilities with dedicated eye care services per 10,000 population. % of PHC facilities with trained nurse in eye care.
E. Availability of Service Delivery (Coverage)	Number of primary care facilities in health system per 10,000 population	Type and number of primary care facilities with eye health expertise (nurses or health workers trained in eye care stationed at facility) in health system per 10,000 population

	Key HSA indicators	EHSA Indicators
F. Service Delivery Access and Utilization	Percentage of people living within standard distance from a health facility	Percentage of people living within standard distance of eye health facility at primary level.
	Financial access (selected indicator based on available data)	Financial access (price of a consultation and a cataract surgery operation compared to living standard)
	Existence of user fee exemptions and waivers	Existence of user fee exemptions and waivers to access eye care services
	Private sector service delivery • Proportion of hospitalizations (or number of hospital days) that take place in the private vs. the public sector • Utilization of private providers for health services in rural vs. urban areas per type of provider Percentage of women seeking antenatal services from public vs. private providers	Proportion of cataract surgery operations that take place in the private vs public sector Utilization of private providers for eye care services in rural vs. urban areas per type of provider
		Proportion of hospitalizations (or number of hospital days) that take place in the private vs. the public sector
G. Organization of Service Delivery	Daily availability of full range of key primary health care services	Daily availability of primary eye care services
	Number of vertical programs	Number of vertical eye care programmes
H. Quality Assurance of Care	Existence of national policies for promoting quality of care	Are national policies for promoting quality of care followed by eye care providers?
	Existence of quality standards adapted to local level situations	Existence of national eye care quality standards adapted to local level
	Existence of clinical supervision by district level supervisor	Clinical supervision by district level supervisor include eye care services

Human Resources For Eye Health

Human resources refer to the workforce or human capital of the national health system. According to the World Health Organization (WHO), the phrase "human resources for eye health" (HREH) includes public and private sector such as ophthalmologists, ophthalmic nurses, optometrists, cataract surgeons and mid-level staff. Furthermore, the definition includes all people engaged in actions whose primary intent is to enhance eye health. This module covers a broader look at the HREH situation in the country (statistics), the enabling environment for HREH, and the central processes of planning, developing, and supporting the workforce.

Human Resources for Health (HRH)

	Key HSA indicators	EHSA Indicators
A. The current HRH situation	The number of healthcare providers, by cadre.	The number of healthcare providers, by cadre, that work in eye care?
	Trends for the past 5 years.	Trends in eye care workers over the past 5 years.
	The ratio of cadres of health care workers to the population as well as distribution: • Compared to WHO standards and regional comparators • Disaggregated by cadre • Disaggregated by service delivery level (primary, secondary, tertiary) • Disaggregated by geographic area (province, region, etc) • Comparison of urban/rural • Comparison private/public sector (if available)	The ratio of eye care cadres to the population as well as distribution: • Compared to WHO/IAPB standards and regional comparators • Disaggregated by cadre • Disaggregated by service delivery level (primary, secondary, tertiary) • Disaggregated by geographic area (province, region, etc) • Comparison of urban/rural • Comparison private/public sector
B. Human resource management system	Existence of a costed HRH strategic plan; evidence that strategic plan is being implemented	Does the HRH strategic plan include eye care?
	Availability of systems and capacity for the collection, integration and analysis of HRH data and information including both state and non state players; evidence of utilization of information to plan, train, appraise, and support the health workforce	Do collection systems include information on eye care staff?
C. Policy	Existence of up-to-date HRH policies in place; evidence that HRH policies are actually used or implemented	Are HRH policies relevant to eye care staff and followed by eye care providers?
		Are cataract surgeons recognised by the authorities?
		Are optometrists recognised by authorities and governmental structures?

	Key HSA indicators	EHSA Indicators
D. Education	Production of new health care workers is responsive to the needs of the health care system	Is the production of new eye care professionals responsive to the needs of the health care system?
	Evidence that pre-service education curriculum is updated regularly	Is any pre-service education curriculum for eye care also updated regularly
	Existence of a system of deciding who receives what in-service training; includes coordination and evaluation mechanisms	Does the decision making system support in-service training for eye care staff?
	Ratio of rural vs. urban admissions/ graduates	What is the rural : urban ratio for eye care admissions/graduates? By gender? By ethnicity or region?
E. Partnership	Clear stakeholder leadership process in place for forming or revising HR polices, frameworks, strategic plans: private/FBO sector, professional associations, ministries beyond MOH, etc. (e.g. HRH Observatory or similar coordinating mechanism)	Is the process for forming or revising HR policies relevant to eye care staff?
	Formal agreements or memoranda of understanding (MOUs) in place between Government and other service provision governing organizations (e.g. FBO coordinating bodies, or private facility networks)	Is there a formal agreement or MOU between government and eye care service provision governing organisations?
F. Leadership	Evidence of ministerial, member of Parliament, or Cabinet-level awareness of and/or advocacy for HRH issues	Is there evidence of ministerial, member of Parliament, or Cabinet level awareness of and/or advocacy for eye care HRH issues by Vision2020 Committees?

Medical Products, Vaccines And Technologies

Pharmaceutical management refers to the set of practices aimed at ensuring the timely availability and appropriate use of safe, effective quality medicines and related products and services in any eye care setting. The set of practices that make up pharmaceutical management are organized according to functional components of a cycle or system that may take place at various levels of the eye health system depending on its structure. This module focuses on the following issues related to pharmaceutical management: 1) total expenditure and financing; 2) policies, laws and regulations; 3) procurement, storage, use, and access to pharmaceuticals. The Pharmaceutical Management module is divided into 9 indicators. The questions in this module are reflective of the information mapped out in the table below.

Medical Products, Vaccines and Technologies

	Key HSA indicators	EHSA Indicators
A. Standard Indicators	Total expenditure on pharmaceuticals	Total expenditure on pharmaceuticals (medicine and consumables) specifically for eye care (e.g. eye drops, lenses)
	Government expenditure on pharmaceuticals	Government expenditure on pharmaceuticals specifically for eye care
	Private expenditure on pharmaceuticals	Private expenditure on pharmaceuticals specifically for eye care
B. Pharmaceutical Policy, Laws, and Regulations	Existence of a National Essential Medicines Policy (NMP) or other government document that sets objectives and strategies for the pharmaceutical sector based on priority health problems	Does the National Essential Medicines Policy (if exists) include eye care products?
	Existence of a system for the collection of data regarding the efficacy, quality, and/or safety of marketed pharmaceutical products (post-marketing surveillance)	Does the data collected include information on pharmaceutical products specifically for eye care?
C. Selection of Pharmaceuticals	Existence of a national essential medicines list (NEML)	Inclusion of medicines specifically for eye care in NEML?
	Total number of pharmaceuticals (in dosage forms and strengths) on the NEML	Total number of pharmaceuticals specifically for eye care on the NEML
D. Appropriate Use	Existence of national therapeutic guides with standardized treatments for common health problems	Do national therapeutic guides with standardized treatments include common eye health problems?
	Existence of treatment guidelines used for basic and in-service training of health personnel	Do treatment guidelines for training include eye care staff?
E. Financing	Proportion of the annual national expenditure on medicines is by the government budget, donors, charities, and private patients	Proportion of annual national expenditure on eye care medicines is by government budget, donors, charities and private patients

Eye Health Information System

A **Health Information System** (HIS) is defined as "a set of components and procedures organized with the objective of generating information which will improve health care management decisions at all levels of the health system" (Lippeveld et al. 2000). The goal of a HIS is to 1) allow decisions to be made in a way that is both evidence-based and transparent and 2) produce relevant and quality information to support decision making (Health Metrics Network 2006). For this reason, this module is an assessment of the HIS' ability to produce valid, reliable, timely, and reasonably accurate information for use by planners and decision-makers. The results of this assessment will therefore provide insight into how HIS strengthening might be included in plans to support overall eye health system and general health system strengthening. This module focuses on the following issues: 1) health status and systems indicators; 2) resources, policies, laws regulation; 3) data collection and quality; 4) data analysis; and 5) use of information for management, policymaking, governance, and accountability.

Health Information System

	Key HSA indicators	EHSA Indicators
A. Information Products	Percentage of disease surveillance reports received at the national level from districts compared to the number of reports expected	Disease surveillance reports received at the various levels of the health system include information on eyes?
B. Indicators	Availability of minimum core indicators at national and sub national level (covering all categories of health indicators: determinants, inputs, outputs and health status)	Is eye care included in the minimum core indicators?
C. HIS Resources	Presence of international donors providing specific assistance to support strengthening the entire HIS or its individual and/or vertical components in more than one region	Are international donors involved in eye care supporting HIS?
D. Data Sources	Availability and accessibility of data sources	Availability and accessibility of data sources specifically for eye care?
E. Data Management	Percentage of districts represented in reported information	% of districts reporting eye care information
	Percentage of private health facility data included in reported data	% of private facilities reporting eye care information
	Availability of a national summary report which contains HIS information, analysis, and interpretation (most recent year)	Does the national summary report contains information on eye care?
	The data derived from different health programs/subsectors are grouped together for reporting purposes, and these documents are widely available	Reports of health authorities at various levels of the health system include information on eye care
F. Dissemination and Use	Use of data for planning, budgeting, or fundraising activities in the past year	Data on eye care is used for planning, budgeting, or fundraising activities in the past year

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