



Eye health systems assessment

Uganda

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 Sightsavers

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Abbreviations and acronyms

AHSPR	Annual Health Sector Performance Report
CBM	Christian Blind Mission
CSC	Cataract Surgical Coverages
COECSA	College of Ophthalmology of Eastern, Central and Southern Africa
eAFYA	Electronic Hospital Management Information System
eCHIS	Electronic Community Health Information System
eCSC	Effective Cataract Surgical Coverage
ECSAT	Eye Care Services Assessment Tool
EHSA	Eye Health Systems Assessment
EHT	Eye Health Regional Coordinating Team
EMHSLU	Essential Medicines and Health Supplies List for Uganda
FHF	Fred Hollows Foundation
FGD	Focus Group Discussion
HMIS	Health Management Information System
HRH	Human Resource for Health
HCIV	Health Centre IV
HIS	Health Information System
ICMP	Indigenous and Complementary Medicine Practitioners
iHRIS	Human Resources Information System
JMS	Joint Medical Stores
KCCO	Kilimanjaro Centre for Community Ophthalmology
KII	Key Informant Interview
LCI	Lions Club International
MDA	Mass Drug Administration
MoH	Ministry of Health
MoU	Memorandum of Understanding
NADBU	National Association of the Deaf Blind Uganda
NAOCOCS	National Association of Ophthalmic Clinical Officers and Cataract Surgeons
NCD	Non-communicable diseases
NDA	National Drug Authority
NEHCC	National Eye Health Coordinating Committee
NGO	Non-Governmental Organisation
NHIS	National Health Insurance Scheme
NMS	National Medical Stores

NOCP	National Onchocerciasis Control Programme
NRH	National Referral Hospital
NTDCP	Neglected Tropical Diseases Control Programme
OAU	Optometrist Association of Uganda
OCO	Ophthalmic Clinical Officer
OCT	Optical Coherence Tomography
OPD	Outpatient Department
OSU	Ophthalmologists Society of Uganda
PECW	Primary Eye Care Worker
PFP	Private For Profit
PNFP	Private Not For Profit
RAAB	Rapid Assessment of Avoidable Blindness
ROP	Retinopathy of Prematurity
RRH	Regional Referral Hospital
SPARS	Supervision, Performance Assessment, and Recognition Strategy
SQIS+	Self-Regulatory Quality Improvement Systems Plus
UBOS	Uganda Bureau of Statistics
UGX	Ugandan Shilling
UMDPC	Uganda Medical and Dental Practitioners Council
UHC	Universal Health Coverage
UNAB	Uganda National Association for the Blind
UNAB	Uganda National Association for the Blind
UNCST	Uganda National Council for Science and Technology
UNEHCP	Uganda National Essential Healthcare Package
UNMHCP	Uganda National Minimum Healthcare Package
USD	United States Dollar
VCDREC	Vector Control Division Research and Ethics Committee
WHO	World Health Organisation

Executive summary

Introduction

The Eye Health Systems Assessment (EHSA) conducted in Uganda between August 2024 and April 2025 addressed the critical global issue of visual impairment. Visual impairment affects 2.2 billion people worldwide, with preventable causes such as cataracts contributing significantly to a productivity loss of USD 411 billion. Uganda has a population of 45.8 million and a prevalence of blindness among the over-50s (mainly due to preventable conditions) estimated to range from 1.8 per cent to 5.9 per cent. This assessment identifies the strengths and weaknesses of Uganda's eye health system, and makes recommendations for strengthening its integration into the country's wider health system.

Rationale

This EHSA, the first of its kind in Uganda, fills a gap left by the general health systems assessment of 2011, which did not specifically address eye care and is now outdated. The study builds on regional experiences from countries like Kenya and Tanzania to provide evidence for designing new eye health initiatives, enhancing service delivery and advocating for increased resources from both governmental and non-governmental entities.

Objectives

The EHSA's overarching goal is to document the strengths and weaknesses of the Ugandan eye health system in order to inform targeted interventions. Specific objectives include assessing governance, financing, service delivery, human resources, medical products, information systems, infrastructure and the system's responsiveness to vulnerable groups.

Methodology

Using the World Health Organisation (WHO) six health systems building blocks framework, the EHSA employed a multi-methods approach involving document reviews, 61 key informant interviews (KIs) and four focus group discussions (FGDs), each consisting of six to eight participants across four health regions (Jinja, Lira, Mbarara and Kampala), and drawing on domains described in the WHO's Eye Care Services Assessment Tool (ECSAT). The qualitative data generated was analysed thematically, with data coded according to the building blocks framework using Atlas.ti software. Ethics approval was obtained from the Vector Control Division Research and Ethics Committee (VCDREC) and the Uganda National Council for Science and Technology (UNCST).

Key findings

Governance and leadership

Strengths

- Strong governance and coordination. A clear hierarchical structure and strategic realignment from the Ministry of Health (MoH) to health facilities help to enhance oversight, with the repositioned National Eye Care Coordination Office playing a key role.
 - An inclusive and collaborative policy environment. Robust partnerships and representation of vulnerable groups, including the visually impaired, ensure that national strategies are inclusive and responsive to diverse needs.
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- Adaptive, evidence-informed decision-making. Policy reforms, including updated guidelines and staffing norms, reflect a commitment to continuous improvement based on emerging evidence.

Weaknesses

- Inadequate leadership and coordination at sub-national levels hinder effective service delivery due to missing key eye health personnel and fragmented governance structures.
- Low prioritisation and underfunding of eye health limit the deployment of staff and availability of essential resources, thereby weakening service capacity.
- Gaps in policy and strategic implementation – including a lack of mid-term reviews and exclusion of emergency eye care in national policies – undermine timely and responsive care.

Health financing

Strengths

- An increased wage bill for eye health professionals offers potential to improve recruitment and retention within the sector.
- Partner-supported financing mechanisms, both on- and off-budget, help to bridge funding gaps and sustain eye health services.
- Integration of eye health into universal health coverage (UHC) and user-fee exemptions promote equitable access, though resource limitations affect consistent implementation.

Weaknesses

- Inadequate and poorly tracked public financing. Eye health suffers from limited government funding and the absence of a dedicated budget line, making it difficult to monitor investments and ensure adequate resource allocation.
- Fragmented partner support. The lack of a unified financing strategy among implementing partners hampers coordinated and sustainable funding efforts.
- Inequitable private sector access. High and unregulated private sector costs restrict equitable access to eye care and create financial unpredictability for patients.

Health service delivery

Strengths

- A diverse and structured system spans public, private and non-governmental organisation (NGO) providers, ensuring broad reach and addressing diverse eye healthcare population needs.
- Regional Referral Hospitals (RRHs), supported by health development partners, demonstrate significant decentralised eye health service delivery capacity.
- Vertical programme success, such as trachoma elimination efforts, have reduced the risk of blindness for over 10.8 million people, while onchocerciasis control has interrupted transmission.

Weaknesses

- Gaps in service delivery and referral systems where RRHs face staffing shortages and poorly coordinated referral pathways, leading to delayed or ineffective treatment, particularly in high-demand areas.
- Weak primary and community-level infrastructure, where community and school eye health programmes remain underdeveloped, with preventive services and early detection efforts largely dependent on intermittent partner support.
- Inadequate management of critical eye conditions reflected in the system's lack of screening programmes, referral protocols and diagnostic guidelines for key conditions like diabetic retinopathy and retinopathy of prematurity, resulting in underdiagnosis and poor outcomes.

Medical products and pharmaceuticals

Strengths

- Policies prioritise regulation, supply chain management and rational use, providing a structured approach to improving access to essential eye care medicines and supplies.
- Embedding eye health medicines within UHC aligns well with national health priorities, increasing their visibility.
- Participatory policy development enhances the relevance and applicability of regulations to eye health needs.

Weaknesses

- Weak private sector regulation, inconsistent quality control and potential misuse of eye care medicines in the private sector undermine effectiveness.
- Despite inclusion of the surgical consumables in the Essential Medicines and Health Supplies List for Uganda (EMHSLU), the same is not supplied by the National Medical Stores (NMS), which limits procedures like cataract surgery at RRHs.
- Resource misalignment reflected in an overemphasis on conjunctivitis medicines diverts resources from specialised care needs, clashing with the referral system's focus on advanced care at tertiary levels.
- Insufficient stocks, low prioritisation and poor management lead to frequent shortages of critical eye care medicines.
- Low domestic manufacturing capacity increases reliance on costly and vulnerable external supply chains.

Human resources for eye health

Strength

- Revised and expanded staffing norms, with the inclusion of optometrists in public service, enhances the system's ability to address diverse eye care needs.
- Robust training infrastructure, ensuring a growing pipeline of specialised professionals.
- Excess supply of Ophthalmic Clinical Officers (OCOs), providing a solid base.
- Competitive public sector remuneration, improving retention and motivation within the public system.
- Professional development opportunities strengthen workforce skills and specialisation.

Weaknesses

- Human resource shortages and inequitable distribution with significant gaps in ophthalmologist and optometrist staffing across regions and facilities – particularly at RRHs and Health Centre IVs (HCIVs) – undermine equitable access and service continuity, and are worsened by delayed deployments and retirements.
- Governance and regulatory weaknesses reflected in the slow integration of eye health cadres into decentralised structures, inadequate regulation of optician services, and unqualified practitioners compromise quality and oversight.
- System inefficiencies and productivity constraints due to equipment shortages, lack of dedicated eye care spaces, and inappropriate task shifting reduce workforce effectiveness. Underutilisation of trained optometrists limits service expansion for key needs like refractive error correction.

Eye Health Management Information System

Strength

- Comprehensive data collection tools (Revised HMIS 105), providing a holistic view of eye health system performance.
- Expansion of eye health indicators enhances the system's ability to monitor a wider range of eye health issues.
- National-level data aggregation and reporting, highlighting a potential for their visibility in national health priorities.
- Health development partner support enhances system capacity, filling gaps in resources and technical expertise.

Weaknesses

- Inadequate data systems and indicator gaps, where eye health data lacks disaggregation, excludes key indicators like effective cataract surgical coverage (eCSC), and overlooks disability-related metrics, limiting comprehensive system performance monitoring.
- Weak data use and accountability reflected in the poor monitoring and evaluation – particularly in the private sector – and limited use of data for planning at lower levels hinder adaptive governance and service improvement.
- Systemic and operational constraints such as data silos, rigid electronic systems and staff shortages contribute to incomplete reporting and reduce the accuracy and timeliness of eye health information.

Introduction

According to the WHO, 2.2 billion people worldwide had visual impairment by the end of 2023, with many cases being preventable or treatable (1). This results in an estimated USD 411 billion in lost global productivity each year (2).

Uganda faces several challenges in general health service delivery, including eye care. With an estimated population of 45.9 million people (3), the country has an estimated 28,843 blind people, 329,489 people with low vision and 6,314 people who are deaf blind (3).

There are significant regional variations. For example, the latest Rapid Assessment of Avoidable Blindness (RAAB) conducted in the Karamoja region estimated a prevalence of blindness at 4.9 per cent, while in Western Uganda blindness is estimated at 0.9 per cent (4, 5). Many cases of blindness are caused by preventable or treatable conditions, with cataract being the major cause of preventable blindness, accounting for over 40 per cent of cases.

Addressing eye care needs requires a better understanding of the interplay between eye health systems and general health systems. EHSAs serve two main purposes: identifying strengths and weaknesses in eye health systems to prioritise improvements, and helping national eye health authorities and international organisations to design and implement effective interventions. Hence, this EHSA was conducted between December 2024 and February 2025 to assess the current state of the eye health system in Uganda.

Rationale

Despite being comprehensive, the health system assessment conducted in Uganda in 2011 focused on the general health system, and it remains unclear the extent to which the findings apply to eye care (6). The results from this, the first, assessment of the country's eye health system are expected to facilitate the ability of the MoH and eye health development partners to advocate for additional resources from both the government and non-government entities, so that eye care service delivery in the country is improved.

Country profile

Legal framework guiding the health sector

The country's legal framework guiding the health sector is premised in the 1995 Constitution, which guarantees equal rights and access to health services, clean water and education. Key supporting laws include the Public Health Act, Local Government Act, Pharmacy and Drug Act, National Medical Stores Act, Nurses and Midwives Act, Medical and Dental Practitioners Act, Allied Health Professionals Act, Occupational Safety and Health Act, Uganda National Health Research Organisation Act, and the Indigenous and Complementary Medicines Act.

Demographic profile

As of 2024, the country's population stood at 45.9 million, with an annual population growth rate of 2.9 per cent (3). The population is generally young, with half being under the age of 18 and five in every 100 people aged 60 years and above.

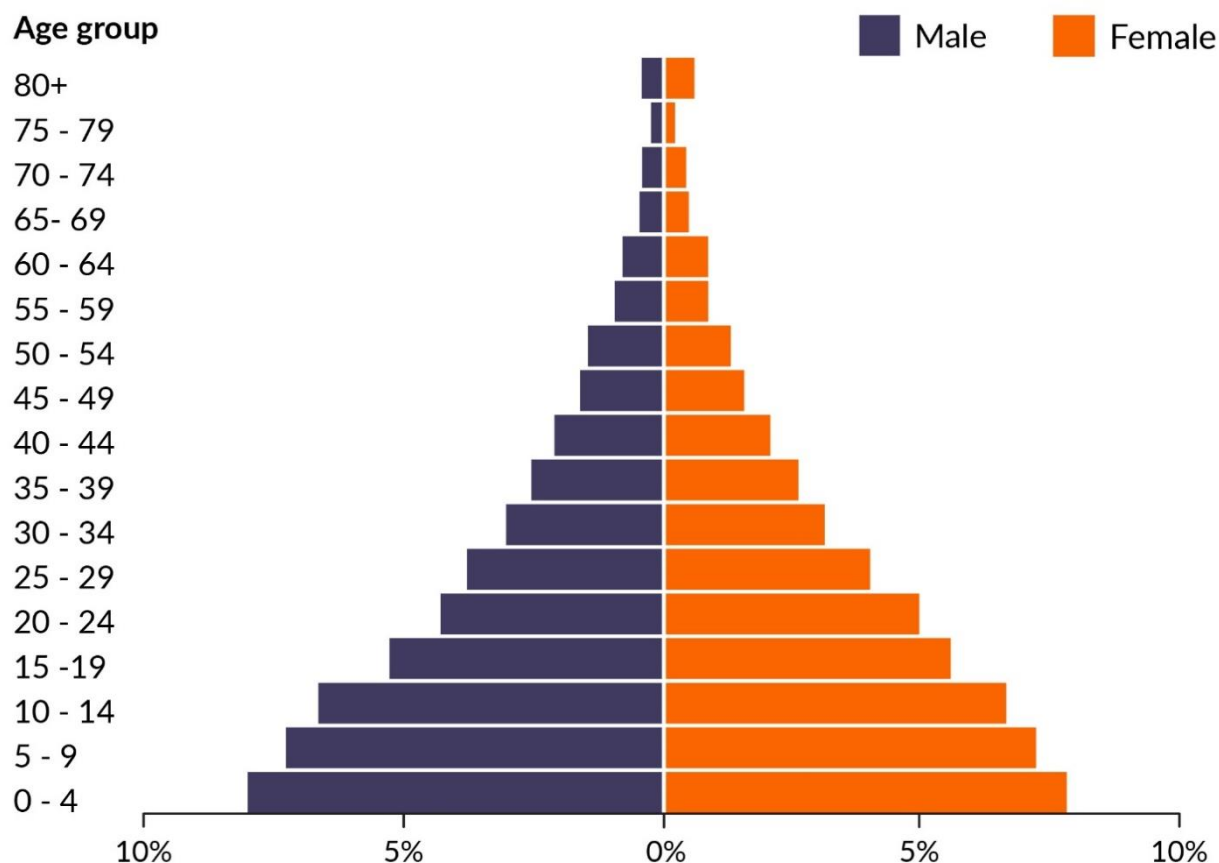


Figure 1: The population of Uganda by age and gender

Uganda health systems overview

The country's health system comprises both public and private health service providers, as well as Indigenous and Complementary Medicine Practitioners (ICMPs). The MoH oversees policy formulation, regulation and supervision.

The public healthcare system includes facilities under the MoH, the Ministry of Local Government and other agencies such as Uganda Prison Services and the Uganda Police Force. It operates under a decentralised system, managed by semi-autonomous institutions at national level and district health teams at local level. Service delivery follows a hierarchical structure, starting from village health teams at community level to regional and national referral hospitals, which are semi-autonomous with independent budgets (7, 8).

Other entities supporting health service delivery in Uganda are managed as semi-autonomous institutions. These include the National Medical Stores (NMS), the National Drug Authority (NDA), the Joint Medical Stores (JMS), Uganda Blood Transfusion Services and the Uganda National Health Research Organisation. The private sector includes profit and not-for-profit service delivery organisations, as well as ICMP, and international and national NGOs and community-based organisations.

Organisational structure of the Ministry of Health

Oversight of Uganda's health sector is led by the Minister and Ministers of State, whose roles are defined by the government. The Permanent Secretary coordinates resources for managing health funds, supported by administration, audit, finance and procurement units. Technical directions are provided by the Director General Health Services, who oversee health service delivery.

In June 2016, the MoH was restructured into four directorates: Strategy, Policy and Development; Public Health; Curative Services; and Health Governance and Regulation. These directorates include twenty departments, each headed by a Commissioner.

To address the challenges posed by decentralised administrative units, the government implements a regionalisation policy. Regional Referral Hospitals (RRHs) are tasked with training, mentoring and supervising lower-level health facilities, and they conduct operational research. The 16 semi-autonomous RRHs, distributed across regions with 10-15 districts each, are well-positioned to strengthen MoH oversight and support health service delivery.

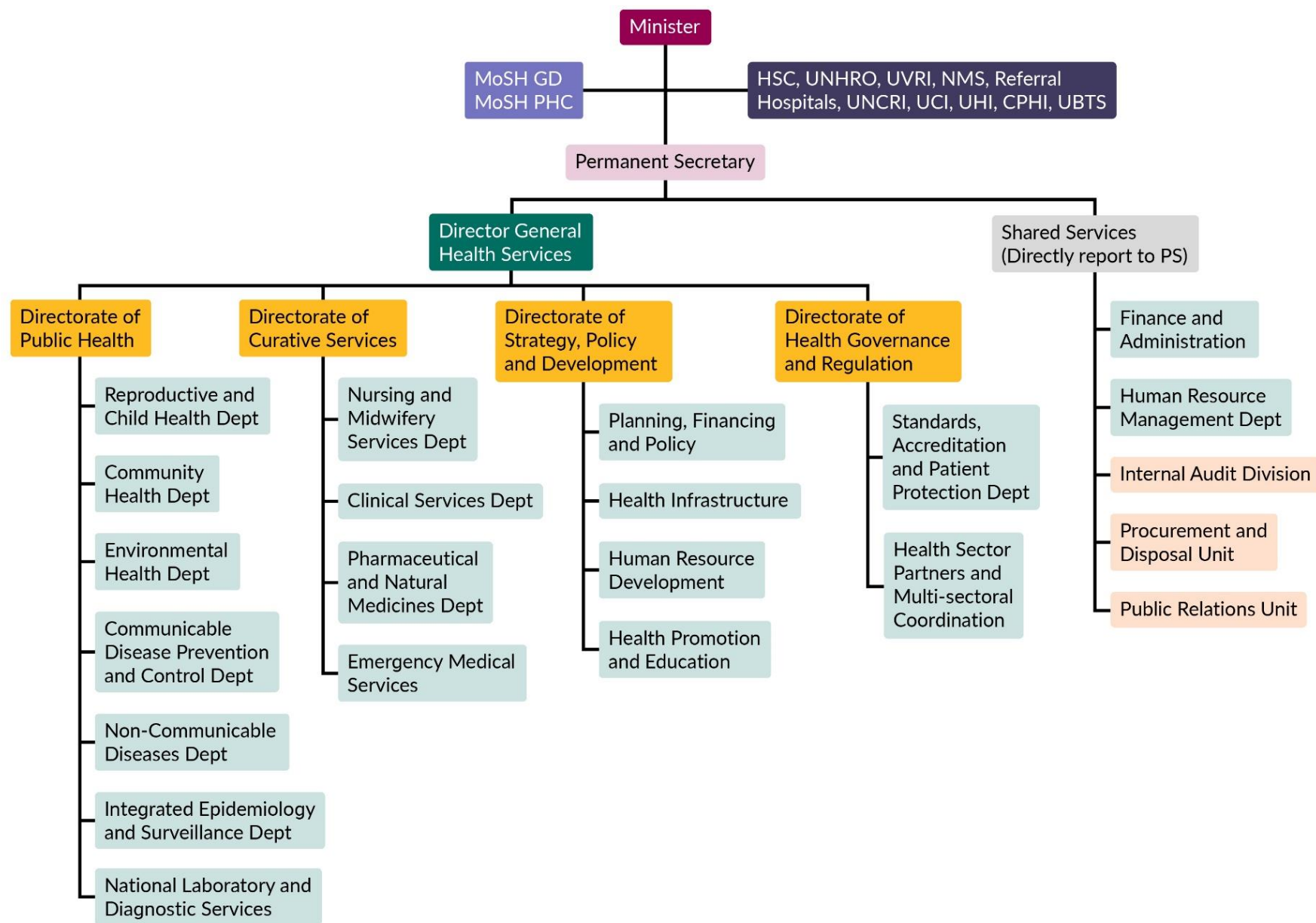


Figure 2: Organisational structure of the Ministry of Health

Organisation of health service delivery

The health sector has been implementing the Uganda National Minimum Healthcare Package (UNMHCP), first introduced in the country in 1999 under the National Health Policy. It is a package of interventions that have been demonstrated to be cost-effective, with the largest impact on promoting health, preventing disease and reducing morbidity and mortality.

Recognising the country's changing epidemiological, demographic and socioeconomic landscape, a review of the UNMHCP led to the development of the Uganda National Essential Healthcare Package (UNEHCP), finalised in 2024. This package aligns with Uganda Vision 2040, the National Development Plan III, the Sustainable Development Goals and UHC.

The UNEHCP serves as a framework for prioritising health service delivery and allocating limited resources effectively, enabling the provision of comprehensive healthcare within a defined framework and referral system. The package is structured around seven clusters: health promotion and disease prevention; communicable disease management; non-communicable disease management; reproductive and child health; surgical and anaesthesia care; emergency and critical care; and geriatric care. Each cluster addresses critical health needs to optimise population health outcomes efficiently.

Objectives of the Eye Health Systems Assessment

Overall objective

The overall objective of the EHSA was to examine and document the strengths and weaknesses of all components of the eye healthcare service delivery system and health systems linkages. This would provide a basis for targeted programmatic work to strengthen the eye health systems infrastructure and improve outcomes for eye conditions in Uganda.

Specific objectives

1. Describe the governance and leadership function.
2. Assess the health financing mechanisms in operation.
3. Describe eye care service delivery.
4. Determine available human resources for eye health.
5. Determine available medical products and technologies for eye care.
6. Assess the information systems for eye health.
7. Assess the available eye care infrastructure.
8. Examine how the above components recognise and address the needs of the groups identified as vulnerable to exclusion from services.

Analytical framework

The EHSA was designed and implemented with guidance from the WHO's health systems building blocks framework (9). It is an analytical lens utilising individual building blocks as predefined themes widely applied to different studies and settings to facilitate investigation of resources in health systems (10-12). Within this framework, a functional health system is conceptualised as consisting of six building blocks, as set out in the figure below.

Figure 3: WHO health systems building blocks framework

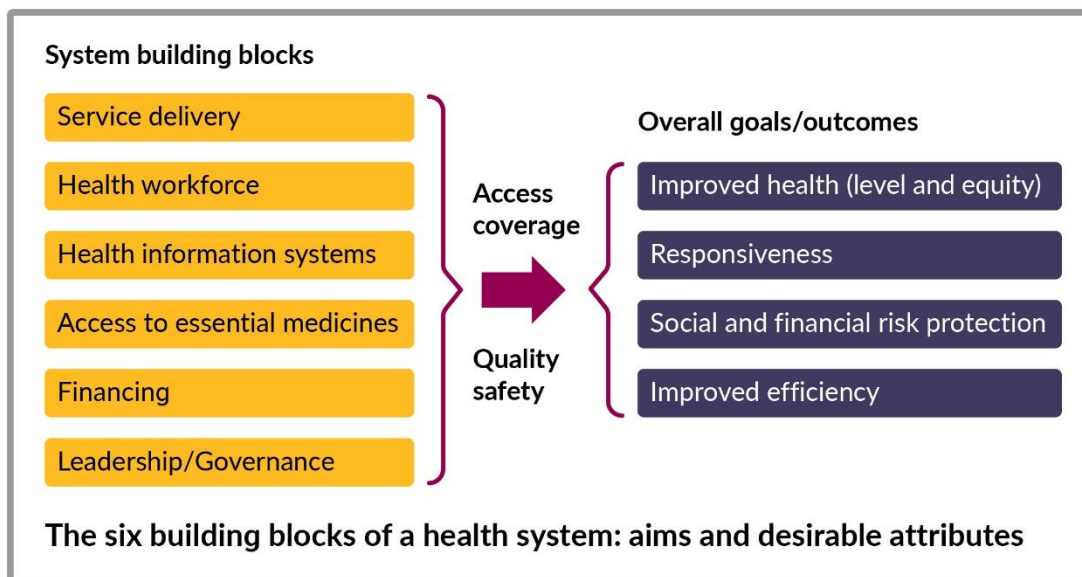


Figure 3: WHO health systems building blocks framework

Methods

Steps undertaken to conduct the EHSA

The key activities in conducting the EHSA included the planning phase, onboarding the research team, data collection, analysis and report writing, validation and dissemination activities.

Study design

The assessment utilised a multi-methods approach, including document reviews, key informant interviews (KIIs) and focus group discussions (FGDs). It prioritised active stakeholder involvement throughout planning, data collection, analysis, reporting and validation. It was implemented in phases, with phase one taking on the review of all relevant documents. Phase two involved the collection of primary data, including the KIIs and FGDs.

Study area

EHSA fieldwork took place in four Ugandan health regions: Jinja, Lira, Kampala and Mbarara. Uganda has 16 health regions, each centred around a Regional Referral Hospital (RRH), which acts as an extension of the MoH headquarters. On average, each region comprises 10-15 districts with decentralised health systems, including district health teams, general hospitals, health centres (HCIV, HCIII) and community health workers.

These four health regions were purposively chosen to give a good picture of eye health services: where eye care services are relatively strong (Mbarara and Kampala); where they may be average (Jinja); or where there are gaps in service provision (Lira). In addition, national level and private sector interviews were predominantly conducted in Kampala.

Study population

The study focused on stakeholders involved in eye health services, including health system managers (facility and district health managers), health workers, researchers, private sector, eye health service providers, NGOs, professional associations, disease association representatives, policy makers, organisations of persons with disabilities and service users. Participants were selected from the four participating regions.

Sample and sampling techniques

The EHSA employed a purposive sampling technique consistent with qualitative research methodology. Overall, a total of 61 individual in-depth interviews were conducted and four FGDs, each consisting of six to eight participants. Details are presented in the table below.

Data collection

Document review

The exercise involved identification and analysis of relevant documents, including project reports, government policies and guidelines, and reports from international agencies. Scientific publications relevant to country context were also reviewed. The process was guided by the health systems building blocks, the overall guiding framework for this EHSA.

Interviews

Primary data collection involved approaching potential respondents, explaining the study's aims and objectives, and obtaining consent in a quiet setting before starting the interview. A structured interview guide, based on the health systems building blocks, was used. Interviews lasted 30 minutes to one hour, and were conducted face-to-face at respondents' workplaces.

Focus group discussions

FGDs were used to elicit information from service users. On the day of the discussion, six to eight respondents were identified from service users that had reported to receive services on that day. Firstly, the purpose of the study was explained to them. Those who expressed willingness to participate were then led to a quiet place where consent was given, before they were joined by other discussion participants. All deliberations were recorded using a digital audio recorder, with the interaction lasting close to one hour.

Data management and analysis

A thematic approach guided by the health systems building block framework was followed. Transforming the eye health systems performance and context into textual expressions of meaning was a reflexive and iterative process which followed these steps: (a) data familiarisation through a thorough review of the transcripts; (b) development of coding framework, derived deductively from the components of the health systems building blocks and inductively from the data; (c) abstraction of coded data into thematic matrices, allowing a constant comparative approach to the health region and respondent category; and (d) interpretation of results, methodological synthesis and write-up of key findings. Atlas.ti version 7.0 qualitative data management software was used to facilitate coding and analysis.

Ethical approval

The EHSA received ethical approval from the Vector Control Division Research and Ethics Committee (VCDREC) (ref: VCDR-2023-37) and the Uganda National Council for Science and Technology (UNCST) (ref: HS4368ES). Administrative clearance was obtained from all participating institutions. Individual informed consent was secured from all interviews and focus group participants before conducting the interviews.

The EHSA assessment team

The assessment team was drawn from representatives of the MoH, health systems researchers and representatives of health development partners, professional bodies, and organisations for persons with disabilities. The assessment team was led by Dr. Alex Wasomoka, Head of the National Eye Coordination Committee at the MoH, and Dr. Stevens

Bechange, a Global Technical Lead for Health and Disability research at Sightsavers Uganda Country Office in Kampala. Fieldwork and the process of compiling this report was led by Dr. Eric Ssegujja, a health policy and systems researcher based at the School of Public Health, Makerere University.

Results

Eye health governance and leadership

Governance of public eye healthcare system

The national eye health coordinator, at the level of Assistant Commissioner of Health Services, oversees governance and coordination of eye health. Key responsibilities include policy direction, planning, resource mobilisation, service delivery supervision, and monitoring and evaluation. Previously part of the Disability Prevention and Rehabilitation Division under the Department of Community Health, the role has been transferred to the Department of Clinical Services within the Directorate of Curative Services. The transfer was justified by the distinction between eye health, which restores health through curative treatment, and disability services, which primarily address blindness as an outcome of unsuccessful treatment.

At National Referral Hospital (NRH) level, eye health governance is led by a senior consultant ophthalmologist acting as the Head of Ophthalmology, who reports directly to the NRH Director. Similarly, at RRH level, governance functions are stewarded by an ophthalmologist doubling as the Head of Ophthalmology, who reports directly to the RRH director (13, 14). At General Hospital level, eye healthcare governance is led by the senior Ophthalmic Clinical Officer (OCO) under the supervision of the District Health Officer and/or doctor also doubling as the hospital in-charge. At HCIV level, which is the first point of eye care with a human resource posting within the health system, governance is by the OCO who reports to both the health facility in-charge and the District Health Officer.

Table 1: Organisation of general health services and eye health services

General healthcare service	Management of service		Eye health service integrated in general health	Management of eye health
Community	VHT	District health officer	Health education, identification, referral	i/c of nearest health facility
HCII	Nurse	District health officer	Emergency care, referral, health education	i/c of facility
HCIII	Nurse/ CO	District health officer	Emergency care, referral, health education, screening neonates for cataract	i/c of facility
HCIV	CO/ Doctor	District health officer	The above, minor surgery, screening for cataract, refraction	i/c of facility or PECW/OCO
General hospital	Doctor	District health officer	The above, refraction, screening for glaucoma ophthalmology outreach for cataract surgery	OCO

Regional referral hospital	Hospital director	Hospital director	All the above, refraction, tertiary eye care, M&E	Ophthalmologist
National hospital	Ophthalmologist	Hospital director	All the above, complex investigation and sub-specialty care	Head of ophthalmology department
MoH - policy	Senior ophthalmologist	Director clinical services	Policy, plans, mobilising resource, coordination supervision, M&E.	National eye health coordinator

Governance of the private sector providers

Private sector eye health governance in Uganda is categorised into two groups: private not-for-profit (PNFP) and private-for-profit (PFP) service providers. PNFP providers are largely faith-based institutions governed by their respective medical bureaus. PFP providers include corporate hospitals and lower-level service providers, each with distinct governance structures. Corporate hospitals operate under boards, while lower-level providers often follow sole proprietorship models with governance led by their owners.

Oversight is nonetheless undertaken by the MoH, which from time to time identifies and selects experts to perform supervision, regulation and compliance roles on their behalf. For foreign-owned corporate hospitals, obtaining a license requires having a qualified and experienced Ugandan national in a top management position.

Professional bodies' contribution to eye health governance

Key professional bodies in Uganda's eye health sector include the Ophthalmologists Society of Uganda (OSU), the National Association of Ophthalmic Clinical Officers and Cataract Surgeons (NAOCOCS), and the Optometrist Association of Uganda (OAU). Another association of opticians was also identified, although information about its membership and placements remains limited.

These organisations have clear leadership structures and oversee professional and ethical standards for their respective cadres on behalf of MoH. They monitor member placements, track the annual production of graduates and regulate practices within their membership.

	Occupation title	Equivalent ISCO classification	Status of regulation	Name of regulatory body
1	Ophthalmologists	2212 specialist medical practitioners	Regulated	Uganda Medical and Dental Practitioners' Council
2	Optometrists	2267 optometrists	Regulated	Allied Health Professional Council
3	Ophthalmic Clinical Officers (OCOs)	2269 health professional not elsewhere classified	Regulated	Allied Health Professional Council

4	Ophthalmic nurses	2221 Nursing professionals	Regulated	Uganda Nurses and Midwives Council
5	Opticians	2267 Ophthalmic opticians	Unregulated	Uganda Nurses and Midwives Council
6	Ophthalmic operating theatre nurses (OTNs)	2221 Nursing professionals	Regulated	Uganda Nurses and Midwives Council
7	Ophthalmic assistants (OAs)	3221 Nursing associate professionals	Regulated	Uganda Nurses and Midwives Council

Partnerships for eye health service delivery

In 2022, the National Eye Health Coordinating Committee (NEHCC) was created to replace the National Prevention of Blindness Committee. This committee brings together different eye health stakeholders.

Key partners include Sightsavers, Christian Blind Mission (CBM), Lions Club International (LCI), Lions Aid Norway, Fred Hollows Foundation (FHF), Light for the World, local Lions clubs, and Kilimanjaro Centre for Community Ophthalmology (KCCO). These partnerships work through memorandums of understanding (MoUs) with the government.

In addition to MoH's overall oversight and supervision, there is a Self-Regulatory Quality Improvement Systems Plus (SQIS+). This is a digital quality improvement self-assessment tool for all private health facilities that guides the delivery of quality health services, including eyecare, by these entities.

Policy and strategic plans

The National Eye Health Strategic Plan (2021/22-2025/26) guides eye care policies, building on past strategic plans from 2000-2020. It focuses on six areas: improving access to eye health services; training and motivating healthcare workers; ensuring needed supplies and facilities; strengthening research and data systems; fostering partnerships; and increasing funding. While the plan includes a system to track progress, a full review had not been done by the time of the EHSA assessment. Key challenges include delays in deploying optometrists and low government priority for eye health, which affects funding. These issues should be addressed in the next strategic plan.

Coordination of eye health services

National level coordination is led by the NEHCC. This committee includes government departments, NGOs and health partners who oversee the eye health strategic plan. At regional level, the Eye Health Regional Coordinating Team (EHT) manages services and supervision. Key members include regional health officials, hospital administrators, technicians and health partners. However, five of the 16 regional hospitals lack appointed ophthalmologists, and some regions do not have principal OCOs. At district level, the District Health Management Team oversees eye care. The District Eye Health Coordinator, chosen from OCOs, leads local coordination. Lower health facilities have delegated health workers for eye care. Stakeholders noted weak sub-national coordination, leaving many tasks to

regional eye health leaders. The effectiveness of implementation depends on active OCOs and health partners, especially in hospitals. Districts without dedicated OCOs face weaker coordination efforts.

Planning and priority setting for eye healthcare interventions

Eye healthcare planning follows MoH guidelines. Though unfunded, it is a participatory process led by NEHCC, the main technical working group. Regional ophthalmologists at referral hospitals implement national eye health plans for both public and private providers. However, eye health remains a lower priority in the public sector, despite existing coordination platforms. Health development partners play a key role by providing financial and technical support.

Participation of people with disabilities in eye health decision making

People with disabilities were reported to participate in eye health decision making through representation by the Uganda National Association for the Blind (UNAB). This was done through awareness raising among its membership, advocacy for better services, and taking part in key forums like the National Blindness Committee at MoH. There are laws and policies that support disability inclusion in healthcare, including the Persons with Disabilities Act 2020 and Uganda's Constitution, which protect equal rights and access to services. International NGOs like Sightsavers, CBM and deaf-blind groups – along with local organisations such as UNAB and the National Union of Disabled Persons of Uganda – work to ensure disability voices are heard. Their advocacy efforts often peak during World Sight Day events.

Guiding policies

The Uganda Clinical Guidelines (2023) include protocols for the management of eyecare conditions, including infections and inflammatory eye conditions, as well as trauma and injuries to the eye clearly stipulated. The Essential Medicines and Health Supplies List (EMHSLU) (2023) now includes eye health medicines, which were previously missing from the NMS. Guidelines for both lower and higher-level health centres include eye care provisions, and the health service standards manual provides protocols for managing eye conditions. However, national emergency health policies do not specifically cover urgent eye care needs. Limited prioritisation of eye health affects funding for medicines, equipment and trained workers, making service delivery challenging.

Eye health financing

Financing for health in Uganda

The health sector budget for FY2023/24 was UGX 4,052 trillion, with 62 per cent from the government and 38 per cent from health partners (8). A supplementary UGX 95.03 billion was added, but overall, health funding as a share of the national budget has been decreasing. Eye health does not have direct funding in the budget and is given lower priority, affecting resources. Funds for eye care mainly go to salaries, equipment and medicines through the National and Joint Medical Stores. In 2023/24, 29 per cent of the government's health contribution went to wages, 27 per cent to supplies, and six per cent to infrastructure.

District-level eye health funding follows primary healthcare guidelines and supports salaries and supplies. However, eye care remains a lower priority compared to other health needs.

Health development partner financing for eye health

International health development partners contribute to financing eye health through two main methods: on-budget and off-budget support. On-budget funding pools resources for the MoH to run key programmes. A major example was the elimination of blinding trachoma in 51 districts, funded by the Queen Elizabeth Diamond Jubilee Trust with Sightsavers, RTI International, Water Missions Uganda, World Vision and the WHO. Off-budget support includes various programmes run directly by partners or through local organisations. These partnerships vary in duration, procedures and geographic coverage.

Table 2: Health development partner off-budget financing for eye health in Uganda

s/n	Health development partner	Area of financing	Geographic coverage
1	Sightsavers International	Service delivery, health worker training, infrastructural support, national level coordination strengthening	Eastern, Northeastern and previously supported in West
2	Christian Blind Mission (CBM)	Infrastructural support, health systems strengthening, health worker training	Western, Central Northern and West Nile Regions
3	Light for the World	Infrastructural support, health worker training, equipment provision and maintenance	National referral optical workshop at Entebbe
4	Lions Club International (LCI)	Infrastructural support and service delivery	Northern Uganda
5	Fred Hollows Foundation (FHF)	Health systems strengthening, service delivery, health worker training	Central and Western Uganda
6	Kilimanjaro Centre for Community Ophthalmology (KCCO)	Service delivery	Northern Uganda
7	Brien Holden Vision Institute	Child eye health programming	
8	African Empowerment Hub	Service delivery-cataract surgery	Central Uganda
9	Lions Aid Norway	Service delivery, health worker training	Mbarara, Masaka, Kampala, Jinja, Mbale, Lira Gulu and Arua Health regions.
10	World Vision	The Karamoja Trachoma project	Karamoja region
11	The Carter Centre	Onchocerciasis elimination	Endemic districts
12	Vision International	Low vision and blindness in secondary schools	20 districts in Uganda

Purchasing arrangements for available eye health services

The government policy is to provide free health services in public facilities, including eye care, but funding shortages force many patients to pay out-of-pocket for private treatment. Some public hospitals used cost-sharing, where patients pay part of the fees, such as UGX 150,000-250,000 (USD 41-68) for cataract surgery in some parts of the country. Others have private wings where patients can pay for faster services. Only 1.1 per cent of the population has private health insurance, mostly in urban areas. Coverage is limited, often paying for consultations but not full treatment. The country has been working toward UHC since 2015. The National Health Insurance Scheme (NHIS) bill was approved in 2021, but has not yet become law. If enacted, it could help fund eye health services.

Cost of selected eye health services

We found that private eye health services in Uganda had no fixed pricing, with costs varying by provider, location and patient ability to pay. Insured clients often paid more, while vulnerable patients would get discounts or pay in instalments. Cataract surgery costs ranged from UGX 300,000 (USD 82) for financially struggling patients to between UGX 2.5 million and 3,000,000 million (USD 682-USD 820) for those considered able to pay. Spectacle prices start at UGX 50,000 (USD 14) but had not set an upper limit.

Eye health service delivery

Eye health service availability at different levels

The country's health service delivery structure is organised along a tiered system, which also applies to eyecare service delivery. According to the national health services organisation, eye care professionals are posted from Health Centre IV (HCIV) upwards, where clinical eye health service delivery starts.

Uganda's national minimum healthcare package includes provisions for eye health services, organised within a tiered health service delivery system. Eye care is provided by various entities at different levels, including public, private and NGOs. Clinical eye health services are delivered from HCIV upwards, employing eye care professionals. Key public entities involved in eye health include MoH (which oversees national and regional referral hospitals), local government health facilities (HCII, HCIII, HCIV and general hospitals), and other ministries such as the Ministry of Defence and Veterans Affairs and the Ministry of Education and Sports. Private entities, including both profit and non-profit organisations, as well as NGOs, also play a significant role in delivering eye care services.

National referral hospitals eye department

Uganda has three National Referral Hospitals (NRHs) offering eye care: Mulago, Naguru and Kiruddu, all based in Kampala. These hospitals provide different levels of service and also serve as training centres, with Mulago being the main one. They offer specialised care, complex investigations and general eye treatments. However, Naguru and Kiruddu have lower eye care capacity compared to some regional hospitals like Mbarara, Gulu and Lira. Only Mulago functions fully as a national referral centre for eye health.

Regional Referral Hospitals eye department

Uganda has 16 RRHs offering eye care services, including refraction, advanced treatments and monitoring. However, three hospitals – Kabale, Kayunga, and Hoima – do not have an officially appointed ophthalmologist.

General Hospitals eye department

Uganda currently has 185 GHs following the upgrade of former HCIV health facilities. These hospitals provide various eye healthcare services, including refraction, glaucoma screening and outreach for cataract surgery, in addition to services offered at lower-level facilities. Each GH serves around 500,000 people at district level. Some have dedicated eye units, while others use temporary spaces. Many hospitals lack proper eye care supplies, and some have outdated equipment needing repair.

Eye health services at HCIV

Uganda has 239 HCIV health facilities where clinical eye care starts. Each has OCOs and primary eye care workers, who provide minor surgery, cataract screening and refraction. Limited public funding affects service delivery, especially in areas with little partner support. These facilities also host cataract surgical camps and outreach programmes from RRHs.

Primary level eye healthcare service

Lower-level health facilities (HCIII and HCII) provide basic eye care. Services are offered by OCOs, ophthalmic nurses, ophthalmic assistants or general nurses. There are 1,350 HCIIIs and 1,772 HCIIIs offering emergency care, referrals, health education and neonatal cataract screening.

Eye health promotion services

The national health policy aims to ensure access to quality health promotion and disease prevention, striving for a UHC target of 90 per cent by 2030. The MoH runs health promotion programmes through District Health Officers, focusing on education and prevention. RRH eye departments conduct outreach activities, including cataract surgical camps at HCIVs, mainly supported by health partners. Community health promotion depends on partner support. Key services include health education, referrals and screenings. Partners also help mobilise patients and provide transport both before and after cataract surgery.

School eye health programmes

The national school health policy requires regular screenings for common health issues, including eye checks for children. However, limited public funding makes implementation difficult. Success depends on district resources and partner support.

Private eye healthcare service providers

The private sector is very active in the delivery of eye health services in Uganda. PNFP entities, through their respective medical bureaus, provide specialised tertiary-level eye health services at their facilities. PFP providers also deliver different levels of eye care. Corporate hospitals provide advanced treatments like corneal transplants, mostly in Kampala and Mbarara. Some ophthalmologists work in both public and private sectors, but their numbers are too few for the growing demand.

Eye health morbidities reported in 2020-2024

A five-year review (2020-2024) of the DHIS2 dataset showed common eye conditions reported at RRHs. Among outpatient cases, over 74,925 (50 per cent) were classified as ‘other’ eye conditions, an issue partly attributed to challenges with the reporting system. These were followed by refractive errors, cataracts and glaucoma. For inpatient cases, the main conditions were “other” eye issues, cataracts, refractive errors, glaucoma and diabetic retinopathy.

In the past 5 years, we have realised a cataract challenge in the wilder population and a high number of uncategorised clients.

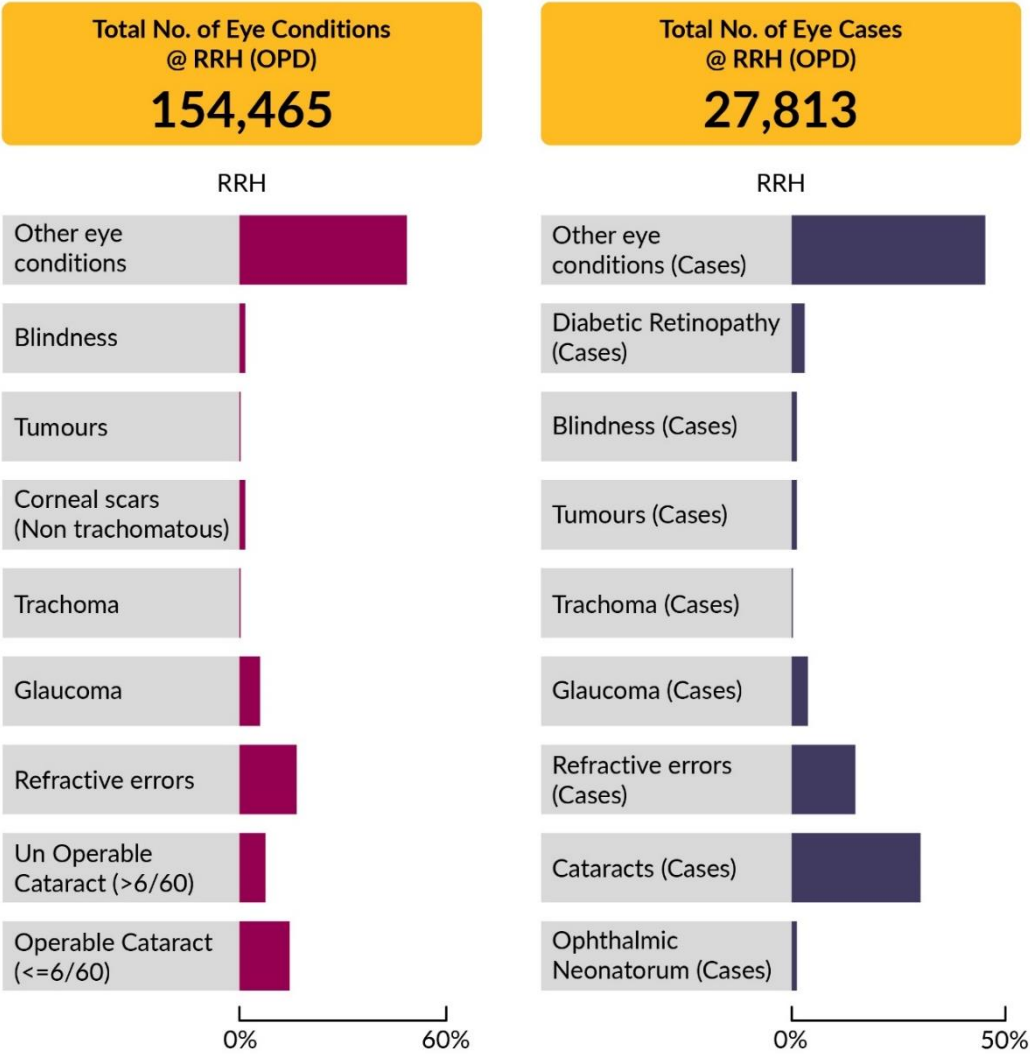


Figure 4: Eye conditions reported by out and in patient departments, 2020 - 2040

Vertical eye health programmes

Elimination of blinding trachoma

Elimination of blinding trachoma is a vertical programme implemented by the MoH in 51 target districts through the Neglected Tropical Diseases Control Programme (NTDCP). By FY2023/24, Uganda had achieved 96 per cent elimination in 49 out of the 51 target districts, with Moroto and Amudat districts being the only two where infection was still prevalent. Within these districts, the government was implementing mass treatment and surveys as main key interventions. Efforts to eliminate blinding trachoma were supported by

implementing partners; for example, Water Mission intervened by sensitising communities on trachoma, as well as improving hygiene and sanitation, and World Vision implemented the Karamoja trachoma project. Other interventions include collaboration with water and education sectors to sustain the gains achieved and synchronising mass drug administration (MDA) with Kenya for concurrent treatment of nomadic populations across the shared border.

The National Onchocerciasis Control Programme

Onchocerciasis (river blindness) was common in 49 districts across western, northern and eastern Uganda, putting 7.8 million people at risk. The National Onchocerciasis Control Programme is run by the MoH. Uganda has made great progress toward eliminating the disease, according to the 2023-2027 Neglected Tropical Diseases Master Plan. Efforts now focus on tracking cases for early treatment. The programme is supported by USAID, RTI and the Carter Centre, but challenges remain. Issues include refugee influx from affected areas, reduced funding for vector control, declining community participation and limited resources for training healthcare workers in post-elimination monitoring.

Non-communicable diseases (NCDs) and eye health

The rise in NCDs is affecting eye health in Uganda. More diabetic patients are developing diabetic retinopathy, but screening rates remain low. Challenges include poor health awareness, limited trained staff, scarce screening equipment and high patient loads in NCD clinics. Referral issues and a shortage of ophthalmologists make treatment difficult. DHIS2 data from the past five years shows diabetic retinopathy to be a leading cause of hospital admissions. Despite its inclusion in Uganda's Clinical Guidelines (2023), there are no national or regional screening programmes for specialist eye conditions.

Prematurity and eye health

The increased survival of premature babies, especially those born before 37 weeks, has implications on eye health. Retinopathy of Prematurity (ROP), a complex eye disorder, is one such complication and remains one of the leading causes of blindness among children. In Uganda currently, despite several efforts to integrate eye care, the condition largely remains undiagnosed in the wider health system with current efforts predominantly at tertiary level PFP, PNFP and the NRH all situated in the capital city. One study conducted at two tertiary level hospitals established that up to six per cent of preterm infants born were diagnosed with the condition (15). Early treatment is crucial, but the 2023 Clinical Guidelines do not include ROP, highlighting the need for its inclusion. Without national screening guidelines, quality care is uncertain. One hospital has already faced legal action for medical negligence. The MoH must address these gaps in policy to prevent similar cases.

Childhood blindness

The most recent national census puts estimates at 28,843 blind people, but there is no data on childhood blindness. Global estimates show 1.5 million blind children, with 500,000 more affected yearly. Half die within one to two years (16). Programmes addressing childhood blindness include CBM's retinoblastoma treatment at Ruharo Mission Hospital and Vision International's support for visually impaired youth in secondary schools. The National Association of the Deaf Blind Uganda (NADBU) helps deaf-blind individuals access services like health, education and mobility. It also advocates for better rubella vaccination coverage

to prevent congenital rubella syndrome, a major cause of vision and hearing impairment among children. Uganda's MR vaccine coverage remains below the recommended levels, with only 90 per cent for MR1 and 28-41 per cent for MR2(8, 17). Laboratory data shows that over 75 per cent of suspected measles cases are actually rubella.

Cataract surgical services

Cataract is the leading cause of adult blindness in Uganda (4, 5, 18) and DHIS data shows it is the most common eye surgery in the 16 RRHs. From 2020-2024, Mbarara RRH had the highest number of cataract surgeries (n=4,007). Moroto and Lira RRHs followed, each reporting over 2,000 surgeries. It is important to note that data from private and non-profit facilities, national referral hospitals and partner-supported outreach programmes is not included. The MoH needs to enforce and strengthen data reporting in the DHIS2 system for all providers.

Table 3: DHIS2 data showing cataract surgeries conducted at RRHs over a five-year period (2020-2024)

RRH	Average	Median	% Cataract Surgeries	% Glaucoma Surgeries	% Trachoma surgeries for TT	% Other Ocular Surgeries
Mbarara RRH	1002	904	55%	6%	0%	39%
Moroto RRH	752	107	93%	0%	4%	3%
Lira RRH	532	52	95%	0%	0%	5%
Mbale RRH	447	327	63%	4%	0%	33%
Arua RRH	422	281	66%	0%	2%	31%
Jinja RRH	379	158	79%	1%	0%	19%
Gula RRH	265	250	52%	1%	0%	46%
Masaka RRH	208	129	69%	0%	1%	31%
Fort Portal RRH	186	154	40%	1%	0%	59%
Mubende RRH	174	125	64%	1%	0%	34%
Hoima RRH	157	103	31%	1%	0%	67%
Soroti RRH	98	37	81%	0%	0%	19%
Yumbe RRH	85	0	100%	0%	0%	0%
Kabale RRH	79	14	91%	3%	0%	6%

Entebbe RRH	17	0	100%	0%	0%	0%
Kayunga RRH	1	0	0%	0%	0%	0%

Cataract surgical coverage (CSC)

Recently, changes have been made to the definition of CSC, which now measures the number of cataract operations performed annually per million population. According to the 2023 Karamoja RAAB results, CSC for the region was estimated at 34.5 per cent for visual acuity less than 6/12 and 41.5 per cent for visual acuity less than 6/18. Within the Northern region, RAAB results revealed that among patients with visual acuity of <6/12, CSC was 1.4 [0.2-2.5] for patients with any disability, 0.2 [0.0-2.2] for any non-seeing disability and was highest among the no disability at 5.3 [1.9-8.8]. From South Western Uganda, RAAB results revealed that effective CSC among patients with visual acuity of <6/12 was 0 [0.0-1.6] for patients with any disability, and 0.1 [0.4-1.0] for patients with any non-seeing disability, while for patients with no disability, it was highest at 7.5 [4.3-10.7].

Effective cataract surgical coverage (eCSC)

The definition of eCSC has evolved over time. For this report, the definition used aligns with the International Centre for Eye Health at the London School of Hygiene and Tropical Medicine, and is consistent with WHO guidelines. eCSC measures the proportion of individuals in a population who have undergone successful cataract surgery compared to all who require surgery. RAAB reports applied this revised definition. The October 2023 RAAB in Southwestern Uganda (Ankole sub-region) showed that 19.5 per cent of operated eyes achieved post-operative visual acuity of 6/12 or better, while a December 2023 RAAB in Northern Uganda (Acholi sub-region) reported 26.5 per cent. The best results in 2023 were from the Karamoja sub-region, where approximately 50 per cent of operated eyes had post-operative visual acuity of 6/18 or better, slightly down from 50 per cent in 2015. However, systems for monitoring cataract surgical outcomes are lacking, leading to insufficient tracking of patients eye health surgical outcomes.

Eye health service quality assurance

There is a national quality improvement framework to monitor health services, including eye care (19-21). The MoH oversees this through its quality assurance department and Uganda Clinical Guidelines. Availability of guidelines in eye departments varies. Some tertiary non-profit facilities have them, while others do not. In the private sector, the SQIS+ tool (22, 23) helps private health facilities assess their quality in areas like patient care, supplies, equipment and education. The eye health strategic plan aims to provide accessible, inclusive and high-quality services.

Access to eye health services by people with disabilities

The MoH has initiated various efforts to make health service delivery, including eye health, more accessible for people with disabilities. The Uganda National Association for the Blind (UNAB) is part of the National Blindness Committee to advocate for disability representation in policy-making. Some health facilities have made disability access improvements, but official reports mostly cover intellectual and leprosy disabilities. Currently, no public health

facility in Uganda has a low vision unit, and vision rehabilitation services are limited to a few private institutions. Additionally, the slow absorption of optometrists into public service further hampers access to eye care for individuals who have lost their sight.

Eye health medical products and pharmaceuticals

Procurement and distribution of eye medicines to health facilities

The National Medical Stores (NMS) are responsible for procuring, storing and distributing medicines, including those for eye healthcare, while the Joint Medical Stores (JMS) serve the private not-for-profit (PNFP) sector. At lower health facility levels (HCIII and HCII), a hybrid pull system is used for procurement and distribution, where facilities provide input on the medicines they need. Although intended as a push system, this leads to varying supplies based on facility-specific requests, deviating from the previous practice of uniform stock distribution based on service delivery levels. From HCIV to the National Referral Hospital, a pool system is implemented, allowing facilities to request their preferred drugs and supplies. Although the eye department participates in procurement meetings, it does not guarantee that prioritised medicines will be included in the final orders. A major challenge is inadequate funding, compounded by the involvement of various implementing partners and donors who also procure medicines for eye health programmes.

Selection of eye health care medicines

The Essential Medicines and Health Supplies List (EMHSLU) was updated in 2023, following its last revision in 2016. This list organises items according to levels of service provision, required competencies and the Vital, Essential, Necessary (VEN) classification system, which prioritises items based on their health impact to ensure that lifesaving medication is consistently available at health facilities. Currently, the list comprises 48 items related to eye health encompassing various categories, including diagnostic agents, anti-infective and anti-inflammatory medications, local anaesthetics and glaucoma treatments. However, certain critical items – such as specific sutures for oculoplastic surgery, cataract surgery knives, intraocular lenses and viscoelastic materials – are absent, complicating surgical procedures.

Despite the updates made to the EMHSLU and the Uganda Clinical Guidelines, the implementation of these guidelines remains hampered by insufficient resources, resulting in challenges of acquiring all necessary eye health medications. Particularly concerning is the exclusion of cataract surgical consumables, which are vital since cataracts are the leading cause of preventable blindness. These items are not provided by the NMS. This gap significantly impacts the availability of cataract surgery supplies at regional referral hospitals. Additionally, the limited range of intraocular lens powers available in the EMHSLU falls short of the WHO's recommendations for a diverse array of lens options (24).

Managing eye health pharmaceutical products and stock

In Uganda, health supply chain management is coordinated at national level by the MoH, with support from agencies like the NMS and NDA (25). Districts manage supply chains locally, while individual health facilities oversee their own operations. The Supervision, Performance, Assessment and Recognition Strategy (SPARS) programme is implemented for medicine management, including eye health supplies, in both public and private sectors (26). Facilities are assessed using 25 indicators across five domains, with stock

management evaluated through indicators such as the availability and accuracy of stock cards. Despite these measures, adherence to standards varies widely, and fieldwork has revealed a lack of sufficient eye health supplies, highlighting significant gaps in the implementation of protocols.

Local manufacture of eye health medicine

Most eye health medicines in Uganda are imported, but there are instances of local production. The Uganda National Drug Policy (2002) promotes local drug manufacturing to enhance national capacity for producing essential medicines, supported by incentives such as tax breaks and reduced import tariffs (27). This has encouraged various entities to engage in local production of eye health medicines, particularly buffered chlorhexidine (CHX) eye drops (0.2% w/v). Notable producers include Abacus Parenteral Drugs Limited, Mengo Hospital and Ruharo Mission Hospital, which has a licensed production unit for ten different eye medicines, including fluorescein, cycloplegics, mydriatics, antibiotics and treatments for various eye conditions (28, 29). This local manufacturing makes these medicines more affordable for users.

Rational use of eye medicines

The Uganda National Medicines Policy (2015-2020) and the Uganda Clinical Guidelines 2023 aim to promote the rational use of eye care medicines, led by the MoH's Pharmacy department. These guidelines, developed with stakeholder involvement, are supported by EMHSLU and Practical Guidelines for Dispensing (24). The MoH's Medicines and Therapeutic Committee manages pharmacovigilance, but implementation faces challenges such as limited supervision and resource constraints, particularly in rural and private sectors. Supervision gaps, along with unregulated private clinics, complicate monitoring efforts. The EMHSLU identifies issues like prescriber inconsistency, supply challenges and unpredictable demand for eye medicines (24).

Eye care equipment maintenance and state of repair

Regional eye health service delivery hubs, such as Kampala and Mbarara, have a higher concentration of private sector players and ophthalmologists, who are better equipped for the maintenance and repair of modern eye care, including cataract surgery. The private sector experiences fewer maintenance challenges with their equipment compared to public facilities, where maintenance issues are significant. The capacity of regional maintenance workshops to repair specialised equipment is reportedly inadequate. The current eye care strategic plan outlines goals to enhance the availability and functionality of eye care equipment at RRHs and tertiary hospitals, such as providing cataract surgery sets, optical coherence tomography (OCT) machines, portable eye examination kits and more specialised surgical equipment (13). However, the strategic plan lacks a costed implementation plan and faces funding challenges for these initiatives to be implemented.

Human resources for eye health

Human resources for eye health policy

The Human Resources for Health Policy (2006) is the primary guiding framework for health personnel in Uganda, aiming to develop a skilled and well-distributed health workforce capable of providing equitable access to essential healthcare within available resources (30). However, advancements in technology and changes in eye health service delivery call for a new policy to adapt to these evolving needs.

In response, the MoH has created a Human Resource for Health (HRH) Strategic Plan for 2020-2030, focusing on ensuring equitable access to quality healthcare delivered by a competent and motivated workforce (7). Additionally, the current Eye Health Strategic Plan highlights the current and future challenges in eye health and underscores the necessity for a skilled workforce in addressing these issues, supported by strategic interventions that rely on strong human resources for eye health (13).

Number of eye health professionals in Uganda

The WHO recommends a population-based eye care professional distribution ratio of 1:250 000 for ophthalmologists and optometrists (31). The MoH and WHO's 2023 report on Uganda's health labour market indicates that there are 264 OCOs, 19 optometrists, and 72 ophthalmologists providing eye health services in the country (32). The report includes statistics on the density of eye health workers per 10,000 Ugandans, with the number of ophthalmologists updated based on the revised membership register from the OSU (32).

The MoH and WHO report further makes a ten-year projection of the eye health worker needs in Uganda using population size and eye health worker ratios. Analysis shows that currently (2025), Uganda needs a total of 167 ophthalmologists and 92 OCOs to meet the eye health service delivery needs of Ugandans (32). By 2032, the need to have risen to 236 and 130 ophthalmologists and OCOs respectively.

Revision to the staffing norms

A 2023 revision to the eye health workers staffing norms established several changes. According to personal communication from the Permanent Secretary, the Ministry of Public Service to all chief administrative officers and heads of RRHs, optometrists were absorbed into the public health service structures, RRHs will now have 35 eye health professionals (up from previous six), general hospitals will now have five eye health professionals (up from previous one) and HCIVs will now have a senior OCO.

Eye healthcare professionals within the private sector

The private sector role in national eye health service delivery is acknowledged, contributing through training, recruitment, deployment, management of eye health professionals, funding and policy-making (29). The MoH is enhancing data availability through initiatives that support eye health workers in RRHs with shortages, requiring all eye health professionals to register and obtain licenses, and regulating private sector operations to ensure competent professionals. While data acquisition on the deployment of ophthalmologists is manageable, the same cannot be said for OCOs due to various challenges. These include dual practices, limited government-private sector relationships, self-employment situations lacking formal

data, reluctance from the private sector to share confidential information and informal employment arrangements. Additionally, it is noted that private eye health employers are unevenly distributed, with a preference for urban areas, particularly Kampala capital city.

Managing eye health human resources

The MoH keeps track of distribution of health workers and has developed 10 output indicators and 16 performance indicators for tracking (AHSPR 2022/23). Systems to strengthen these efforts have been put in place, such as ensuring staff salaries are paid on time, having a functional iHRIS in all districts, developing the scheme of service for all cadres, developing a national health workforce inventory, improvement of health worker performance and attendance to duty, and annual training plans – among others. From the field experiences, some of the retiring OCOs were not being replaced on time. This calls for a well-planned and executed eye health human resource projections and actions to address the eminent dangers.

Productivity of eye healthcare professionals

Despite ongoing efforts to motivate eye health workers, challenges around productivity persist. Interviews with practitioners during data collection revealed that some of the major factors include: 1) lack of equipment due to occasional breakdown and unavailable equipment relative to eye health service delivery level particularly at RRHs; 2) inadequate medicines and supplies to facilitate eye health service delivery; 3) weak support supervision; 4) encroachment on eye health professionals to support general health service delivery in other departments; 5) poor deployment practices to other unrelated eye health roles; and 6) a lack of dedicated outpatient department or OT space in some facilities (especially HCIVs).

The government has introduced measures to reduce absenteeism and track eye health professionals' time through biometric systems. However, the amount of time spent on eye care varies depending on the service delivery level, as higher-tier facilities also serve as training sites, necessitating time for teaching. Additionally, RRHs have expanded responsibilities under health service regionalisation, requiring regional ophthalmologists to engage in support supervision for lower-level providers.

Analysis of eye healthcare professionals' needs versus supply

A review of the gap between the available and needed numbers of eye health professionals by the WHO in 2023 reveals a mixed picture. Whereas OCOs appear to be in excess supply, the country is far behind the recruitment requirements to address this gap among ophthalmologists. The report did not review the optometry professionals.

Training and trends in production of eye health professionals

Developing the eye health human resources

Both specialised and non-specialised health workers support service delivery. The Ministry of Education oversees training, while the MoH handles graduate deployment. Undergraduate medical curricula include general eye health training, which is also covered in clinical officer and nursing programmes. Additionally, tailored in-service short courses address skill gaps. Moving forward, the focus will be on specialised training.

As of 2023, three universities in Uganda – Makerere University (MUK), Mbarara University of Science and Technology (MUST), and Kampala International University (KIU) – offer a Master of Medicine (M.Med) in Ophthalmology. The Bachelor of Optometry programme, a newer addition to eye health training, is currently only available at MUK. Additionally, a Higher Diploma in Ophthalmic Clinical Medicine and a Diploma in Clinical Ophthalmology are provided at the Ophthalmic Clinical Officers Training School in Jinja. Optometrists adhere to university entry guidelines with options for direct admission and upgrades for in-service workers. Detailed information on training provided by the German NGO Projekthilfe Uganda eV for opticians and optometrists remains unclear, although the assessment established that two graduates had secured employment at a tertiary PNFP facility. Several other PNFPs, such as Ruharo Mission Hospital and Mengo Hospital, offer various short certificate courses tailored for eye healthcare professionals, including training for ophthalmic theatre assistants and ophthalmic assistants. Analysis provided by the MoH and WHO in 2023 illustrates the training duration and distribution of major eye health training institutions in Uganda.

Recent graduation records indicate that the numbers of graduates in all four training programmes have increased over the years. Although the Higher Diploma in Ophthalmic Clinical Medicine and the Diploma in Clinical Ophthalmology appear as different qualifications, they are indeed the same, the only difference being that while the former is undertaken by post basic students, the latter is offered to direct entrants from high school.

Eye health professional training abroad.

Many professionals have pursued eye health training abroad. These have either been privately sponsored or sponsored by implementing partners. Some ophthalmologists obtained high-level specialised training, while many consultants have received eye healthcare sub-speciality fellowship training abroad. For optometrists, many of the professionals who qualified before MUK introduced a Bachelor's degree or obtained their qualifications from abroad. Employers, particularly the PNFP, that have pursued sub-specialised eye health care training have also supported their employees to obtain the training from abroad.

Professional development

Continuing professional development (CPD)

Eye health professional associations in Uganda, including OSU, NAOCOCS and OAU, have helped their members earn continuing professional development (CPD) points by providing various opportunities. Additionally, many eye healthcare professionals have independently sought out preferred short courses and funded their participation in these courses or international conferences like the College of Ophthalmology of Eastern, Central and

Southern Africa (COECSA). In addition, OSU organises national scientific congresses and hosts regional and international congresses.

Continuing medical education

Various professional associations in Uganda organise continuing medical education (CME) sessions for their members, with the frequency of these sessions influenced by available resources. Pharmaceutical companies and dealerships are involved in shaping some CME content to align with their products and provide support for organising these events.

Leadership and partnerships

Interactions with key stakeholders indicated that direct lobbying and advocacy efforts were instrumental in opening and filling ophthalmologist positions in some RRHs. Professional associations and eye health leadership at the MoH are leading these advocacy initiatives for human resources in eye care. The NEHCC within the MoH serves as a collaborative platform for stakeholders – including academics, NGOs and professional associations – and has been essential in recent advancements in eye health human resources. Various stakeholders involved in eye health services have established MoUs with the MoH to guide their operations and collaboration.

Eye health information management system

Eye health HMIS data structure

The national eye health information systems consist of six components as derived from the WHO health information system (HIS) (33, 34). These include HIS resources, indicators, data sources, data management, information products, and dissemination and use. The HIS resources comprise the legislative, regulatory and planning frameworks, as well as the infrastructure required to ensure full functionality of the HIS. Operational resources include personnel, financing and information, and communication technology, who translate the legislation into Standard Operating Procedures (SOPs). Eye health indicators for monitoring service delivery are well articulated through the different HMIS forms, such as HMIS 105.

Where some indicators are core and collected by the MoH, others are ad-hoc and collected by different entities such as the Uganda Bureau of Statistics (UBOS) through the census data. The eye health data sources include paper-based and electronic, and are primarily through the HMIS forms. There are also other eye health data sources outside the MoH which include both population-based sources (census, civil registration, population surveys surveillance systems) and institutional based sources (research, service delivery records, partners, MDAs, individual records and ad-hoc surveys). Eye health data management is through the DHIS2 and most recently through the eAFYA-powered electronic medical records (EMR). The eye health information products include the DHIS2 reports and any other synthesis covering the six building blocks around eye health service provision in Uganda. Finally, the eye health information dissemination and use refers to all aspects that make eye health information readily available and accessible to decision makers and other stakeholders.

Policies and guidelines

The overall policies for eye health information in Uganda are enshrined in the National Development Plan IV (2025/26-2029/2030), the MoH Strategic Plan (2020/21-2024/25) and the National Eye Health Strategic Plan (2021/22-2025/26) (13). Other related guidelines include Health Information and Digital Health Strategic Plan (2020/21-2024/25), Uganda National eHealth Strategy (2017-2021), and the MoH Handbook on Strengthening Uganda's Health Systems through Standardising Digital Health (2021). In addition, there are laws and legislations around health information, including the Data Protection and Privacy Act 2019 and the Data Protection and Privacy Regulation 2020.

Governance of health information

Health information governance operates at national and subnational levels (33). At national level, it is overseen by the MoH through the Top Management Committee and the Division of Health Information Management. These entities guide and coordinate eye health data collection, analysis and sharing. The Health Information, Innovation and Research technical working group advises on eye health information systems and digital health policies.

Eye health data sources

Uganda collects comprehensive eye health data from health facilities and communities to improve analysis. Hospitals use HMIS forms to record outpatient and inpatient cases. A new electronic system (eCHIS) tracks community-level data, but integration issues create gaps. Other HMIS forms monitor equipment, staffing, medicine stocks and prescriptions. However, eye health is often overlooked due to low prioritisation. Strengthening data management is key to improving services.

Indicators for monitoring eye health service delivery

Eye health indicators are included and tracked, but not separated in core health performance indicators. Performance is assessed using the district and regional league tables, which include hospital statistics like outpatient visits and bed occupancy rates, including eye wards. However, eye health commodities are not part of the 41 essential items monitored in health facilities. Eye condition data is recorded using HMIS forms. Form 105 initially tracked nine conditions but expanded to 28 in 2019, covering cataracts, glaucoma, conjunctivitis and more. Form 108 collects monthly inpatient data. All records are reported through the national DHIS2 health management information system managed by MOH.

Reporting eye health data at health facilities

The health system uses HMIS forms to track eye health at facility and district levels. While the MoH has introduced electronic records (eAFYA EMR and eCHIS), challenges still remain. Some hospitals continue to rely on paper records, while electronic data entry disrupts clinic workflows due to staff shortages and heavy patient loads. Rural areas face power and internet issues, making digital systems unreliable. Problems include vague disease classification, complex referral data requirements and limited medication options in the system. Editing patient records is restricted due to network limitations. The MoH is working to resolve these issues. Cataract surgery data from outreach camps should be reported through district hospitals, but some partners submit it elsewhere, causing duplication. Including district data personnel in camp planning can improve accuracy.

Databases and information products

At health facilities, eye health data is entered into the DHIS2 system. Although data can be processed through eAFYA at any time, the system is currently not being utilised, leading to continued manual data generation. Districts submit their data via HMIS, which is captured in DHIS2 and accessed by the MoH. Public and private health facilities are mandated to have DHIS2 accounts, while lower-level facilities submit data through their supervising public health facilities.

Data management and use

Health facility level eye health data management

Health facilities track eye health data on diseases, staff, equipment, finances and supplies, but its use in planning is limited. Key areas needing improvement include:

- Using disease data to improve services.
- Managing equipment inventory for repairs and purchases.
- Tracking medicine stock for better procurement.
- Monitoring eye health staff for recruitment and deployment.

Some hospitals use eye health data for supervision, but lower-level facilities mostly submit reports without using them for planning. Performance review meetings for health facilities often focus on maternal health, nutrition and HIV, leaving eye health overlooked. To improve prioritisation, data personnel need training to analyse eye health trends and engage in managing eye care information.

District Health Office eye health data management

Every district has a biostatistician in the District Health Office who manages health data using DHIS2. However, eye health reports are rare. Health assistants collect eye health data at facilities, while school health educators provide information, especially during outbreaks. Although biostatisticians can create reports, eye health is not a priority.

National (MoH) level eye health data management

The Annual Health Sector Performance Report (AHSPR) tracks disease trends in outpatient departments. In FY 2023/24, allergic conjunctivitis, bacterial conjunctivitis and other eye conditions ranked among the top 20 diseases, contributing 1.2 per cent, 1.2 per cent, and 0.5 per cent of outpatient department (OPD) visits. In FY 2022/23, allergic and bacterial conjunctivitis were also in the top 20 at 0.9 per cent and 0.8 per cent respectively. The rise in cases signals a growing eye health concern. Increased OPD visits – especially at HCIII, HCIV, and general hospitals – were partly driven by the upgrade of HCII facilities under the Uganda Intergovernmental Fiscal Transfer Reform (UgIFT) programme.

Dissemination and use of eye health information.

There is evidence to demonstrate that eye health information has been used to inform planning and budgeting at all levels of eye health service provision. The fifth national eye health strategy was developed using this data and cataract surgery rates helped to set five-year targets. Information on eye health workers supported recruitment and optometrist inclusion in MOH staffing. Data on service gaps has helped mobilise resources to improve eye care.

Reporting and lobbying

A review of DHIS2 data for 2024 indicated that eye health conditions significantly contribute to morbidity in Uganda. Recent developments in the eye health department have led to revisions in staffing norms, including the incorporation of optometrists and updates to the eye health medicines and supplies list based on reported eye care morbidities.

Key informant interviews highlighted a continuing need for more medicines and supplies, particularly for specialised eye conditions, as many procured supplies focus on treating conjunctivitis. At regional level, despite a pull system for medicines procurement, eye health remains deprioritised compared to other health issues.

At regional level, despite falling under the pull system of medicines procurement, the challenge impeding availability of medicines and supplies was identified as less prioritisation of eye health compared to other health conditions. Additionally, challenges with the HMIS form 105 were noted, as some eye conditions may be misclassified or not captured, leading to gaps in data. Nonetheless, there is hope that the new electronic medical records systems currently being rolled out may solve this issue.

Implementing partner support to eye health information systems

The fifth National Eye Health Strategic Plan aims to enhance the HMIS for eye care. Light for the World, among other partners, is actively supporting these efforts, demonstrating the collaboration of implementing partners to strengthen eye health data systems.

Discussion

Overall, results from this eye health systems assessment revealed notable progress in governance, financing, service delivery and workforce development. Leadership at national level reflected strong and inclusive policies, which have bolstered system oversight and capacity. The eye health integration into universal health coverage and successful vertical programmes such as trachoma elimination demonstrate key achievements. However, critical challenges persist, especially at sub-national levels, due to fragmented governance, inadequate funding, human resource shortages and weaknesses in the data systems. Gaps in coordination, limited essential supplies and persistent challenges with the referral and screening systems affect eye care quality service provision.

The EHSA highlights the governance structure with notable strengths that provide a solid foundation for eye health service delivery, yet reveals persistent challenges impeding its full potential. The clear hierarchical structure, extending from the Ministry of Health to Health Centre IVs, coupled with defined roles and the strategic realignment of the National Eye Health Coordination Office under the Department of Clinical Services, reflects an adaptive approach to integrating eye health within broader health system reforms (8, 13). This repositioning acknowledges eye health as a curative priority rather than solely a disability management issue, aligning with the objectives of the third National Health Policy and the 2022 Regionalisation of Health Services policy (13, 14).

The presence of professional bodies – such as the Ophthalmologists Society of Uganda (OSU) and the Optometrist Association of Uganda (OAU) – alongside a comprehensive policy framework like the National Eye Health Strategic Plan (2021/22–2025/26), further strengthens governance by fostering professional standards and providing a detailed roadmap with six strategic interventions (13). The inclusion of vulnerable populations, such as through the Uganda National Association for the Blind (UNAB) representation on the National Eye Health Coordinating Committee (NEHCC), underscores a commitment to equity, while evidence-informed policy adjustments – such as revised staffing norms and updated clinical guidelines – demonstrate responsive governance (8).

However, these strengths are overshadowed by significant weaknesses that compromise the system's effectiveness. Inadequate resource prioritisation and funding remain critical barriers, undermining the governance potential and limiting the translation of policies into practice. The incomplete operationalisation of decentralised structures, with three Regional Referral Hospitals lacking ophthalmologists and Eye Health Regional Coordinating Teams not fully established, highlights a gap between policy intent and implementation (13). Staffing shortages, particularly the delayed deployment of optometrists, weaken governance capacity, while dependence on implementing partners for coordination and resource mobilisation reveals a lack of self-sustaining public sector governance.

Suboptimal monitoring and evaluation systems, compounded by gaps in data capture and utilisation, further reduce accountability and evidence-based decision-making, skewing resource allocation and hampering advocacy efforts (8, 33). The limited clarity in private sector governance, especially among lower-level for-profit providers, adds complexity, as these entities often operate with minimal oversight, resembling sole proprietorships rather than structured healthcare providers.

Financing emerges as a pivotal area of concern, with no specific budget line for eye health within the national health budget, despite an overall allocation of UGX 4.052 trillion for the

health sector in the financial year (FY) of 2023/24(8). While strengths such as wage bill adjustments for eye health professionals and integration into primary healthcare funding provide some support, the declining share of the health budget – from 8.9 per cent in FY2016/17 to 7.7 per cent in FY2023/24 – and low prioritisation of eye health result in insufficient resources for infrastructure, equipment and medicines (35).

The heavy reliance on out-of-pocket expenditure disproportionately burdens patients, undermining equitable access, while the absence of a fully enacted National Health Insurance Scheme delays potential relief. Fragmented support from health development partners, though flexible, lacks a cohesive strategy, and unregulated private sector costs exacerbate financial unpredictability. These financing challenges echo findings from previous health system assessments in low-resource settings, where underfunding of specialised services like eye health often perpetuates inequities (36, 37).

Service delivery benefits from a tiered structure and a diverse provider network, including public, private for-profit and private not-for-profit entities, which enhance access to specialised care such as corneal transplants and tertiary services. Vertical programmes – notably the elimination of blinding trachoma in 49 of 51 districts and progress in onchocerciasis control – exemplify successful targeted interventions (38, 39). However, staffing shortages at Regional Referral Hospitals, inadequate infrastructure at General Hospitals and inefficient referral pathways disrupt continuity of care – often leading to delayed or abandoned referrals (40).

The limited functionality of community structures and weak implementation of school eye health programmes miss opportunities for preventive care, while the poor management of non-communicable diseases like diabetic retinopathy – lacking national screening programmes – reflects a broader gap in addressing emerging eye health burdens (41). The underdiagnosis of retinopathy of prematurity, despite rising preterm survival rates, further underscores the need for updated guidelines and improved detection capacity (15).

Human resources for eye health present a mixed picture. Revised staffing norms, including the integration of optometrists, and robust training infrastructure signal progress in building a skilled workforce. The excess supply of Ophthalmic Clinical Officers provides a strong base, yet the shortage of ophthalmologists and delayed absorption of optometrists into public service exacerbate regional disparities. Inconsistent deployment, equipment deficiencies and regulatory challenges – such as unlicensed opticians and ‘quacks’ in the private sector – compromise workforce productivity and care quality. These findings align with global trends where workforce maldistribution and inadequate support systems hinder eye health service delivery in low- and middle-income countries (31, 42).

The eye health information management system offers comprehensive data collection tools, such as the revised HMIS 105, and integration with electronic systems like DHIS2, facilitating evidence-based planning and advocacy, as seen in the inclusion of optometrists in staffing norms. However, data quality issues, inconsistent reporting from surgical camps and limited use of data at lower levels diminish its effectiveness (43). The exclusion of eye health-related disability data and minimal focus on eye health in district reviews further reduce its visibility within broader health priorities, a challenge compounded by understaffing and system rigidity (44).

Medical products and pharmaceuticals benefit from a strong policy framework and integration into Universal Health Coverage goals (45), yet weak private sector regulation, inadequate funding and the non-supply of key surgical consumables by the National Medical

Stores despite their inclusion in the Essential Medicines and Health Supplies List Uganda restrict access to specialised care. Overemphasis on conjunctivitis medicines misaligns resources with referral system priorities, while dependence on implementing partners for supply undermines sustainability of the public health systems structures (43). These issues reflect broader supply chain challenges in resource-constrained settings, where donor reliance often masks systemic weaknesses (45, 46).

The Uganda eye health system demonstrates significant governance strengths and strategic advancements, yet its effectiveness is curtailed by resource constraints, workforce gaps and data limitations. Addressing these challenges requires a multi-faceted approach: enhancing resource prioritisation, operationalising decentralised structures, accelerating optometrist deployment, improving data systems and securing sustainable financing. The next strategic plan must incorporate a costed implementation framework to bridge these gaps and align with the UHC target by 2030, ensuring equitable and high-quality eye health services for all Ugandans.

Assessment limitations

This assessment was not without methodological limitations. First, it was conducted in only four out of Uganda's sixteen health regions. While these were purposively selected to reflect a range of eye health service capacities – from relatively strong systems in Kampala and Mbarara to service gaps in Lira – this geographic scope restricts the representativeness of the findings at national level. As such, the assessment may not fully capture regional disparities or unique challenges present in other parts of the country.

Second, the sampling approach relied on purposive selection of participants for key informant interviews and focus group discussions. While appropriate for qualitative research, it may have excluded critical perspectives. For example, the recruitment of service users for FGDs was limited to those already seeking care at health facilities, potentially overlooking the experiences of individuals who face access barriers or who are disengaged from formal eye care services. Additionally, with only four regions covered by the FGDs conducted, the breadth of user experiences may not be adequately represented, particularly among marginalised populations or rural communities in other unique regions.

Lastly, while the use of the health systems building blocks framework provided a structured lens for data collection and analysis, it may have constrained exploration of broader system issues such as equity and intersectoral collaboration, among others.

Recommended areas for further research

To strengthen Uganda's eye health system, further research is needed to address persistent structural and operational gaps. A priority area is the exploration of sub-national governance dynamics, particularly how leadership capacity, accountability and coordination at regional and district levels affect service delivery. Similarly, the financing landscape warrants deeper investigation – especially the cost-effectiveness of user-fee exemptions, the impact of fragmented partner support and the equity implications of high private sector costs. Research should also assess the effectiveness of referral systems and service delivery pathways, with a focus on conditions like diabetic retinopathy and retinopathy of prematurity that are currently underserved.

Supply chain inefficiencies require studies examining the disconnect between national policies and actual medicine availability at facility level, including quality control in private

distribution. On human resources, research is needed to analyse workforce distribution, delayed deployments, task shifting practices and regulatory gaps, particularly for opticians and informal providers. Additionally, the limited use of eye health data for planning and accountability highlights the need for operational research on improving indicator disaggregation, data use and private sector reporting.

Finally, with preventive eye care at community and school levels largely donor-dependent, implementation research should identify scalable, sustainable models to expand early detection and public health outreach. Collectively, these research areas will generate critical evidence to inform policy reforms, improve service equity and quality, and enhance the resilience of Uganda's eye health system.

Conclusion

The governance framework is characterised by a clear hierarchical structure, strategic policy alignment and a strong partnership ecosystem. The repositioning of the National Eye Health Coordination Office within the Ministry of Health's Department of Clinical Services, alongside comprehensive policies like the National Eye Health Strategic Plan (2021/22–2025/26), demonstrates a commitment to integrating eye health into broader health system reforms.

Professional bodies, decentralised governance mechanisms around Regional Referral Hospitals, and inclusive representation of vulnerable populations further strengthen the eye health system's foundation. However, significant challenges undermine its effectiveness, including inadequate resource prioritisation, incomplete operationalisation of decentralised structures, staffing gaps, and weak monitoring and evaluation systems. These limitations hinder the eye health system's ability to fully translate policies into equitable and sustainable service delivery.

Financing for eye health remains a critical bottleneck, with no dedicated budget line and a heavy reliance on out-of-pocket expenditure and fragmented implementing partner support. While wage bill adjustments and integration into primary healthcare funding provide some stability, the declining share of the health budget and low prioritisation of eye health constrain infrastructure, equipment and medicine availability.

Eye health service delivery benefits from a tiered structure and vertical programme successes, such as trachoma elimination, but is hampered by staffing shortages, inadequate referral pathways and limited management of non-communicable diseases like diabetic retinopathy. The absence of national screening programmes for conditions like retinopathy of prematurity and weak school eye health initiatives further highlight gaps in preventive care.

Human resources for eye health demonstrated a promise with revised staffing norms and robust training infrastructure, yet faced challenges from ophthalmologist shortages, delayed optometrist deployment and uneven geographical distribution.

The eye health information system, while comprehensive in its data collection tools, suffers from data quality issues, an inability to capture effective cataract surgery coverage, inconsistent reporting and limited use at lower levels – reducing its utility for evidence-based planning.

Medical products and pharmaceuticals are supported by a strong policy framework but are undermined by weak private sector regulation, inadequate public sector funding, and stock management gaps, particularly for specialised surgical consumables.


While Uganda's eye health system has made significant strides in governance, policy and partnerships, addressing the identified weaknesses requires urgent action. Prioritising resource allocation, operationalising decentralised structures, enhancing workforce deployment, strengthening data systems, and securing sustainable financing are critical to achieving equitable, high-quality eye health services.

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A large, stylized graphic of a human eye, composed of concentric circles and a central iris-like shape, rendered in a lighter shade of the background purple.

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