Integrating eye health into the NCD response

People-centred approaches to prevention and care

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Photo cover: This is a photo of Chini Lama, 74, who came to Pullahari Monastery Eye Camp in Nepal for bilateral cataract surgery. ©Michael Amendolia.

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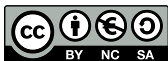

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The burden of noncommunicable diseases

Noncommunicable diseases (NCDs) are recognised as the **world's biggest killer and cause of disability**, constituting a global health crisis and a major challenge to sustainable development. NCDs account for over 70% of all deaths worldwide; that is, 41 million people die every year due to NCDs.[1] Furthermore, people living with NCDs are also at higher risk of developing severe complications from infectious diseases, such as COVID-19.[2]

Current data estimates that NCDs will **cost the global economy approximately USD $47 trillion between 2010 and 2030**, resulting in a significant impact on GDP.[3] The NCD burden disproportionately impacts low- and middle-income countries (LMICs), and in particular, marginalised populations including women, older people, migrants, people living in poverty and indigenous communities. In addition, various NCDs often co-exist together in the same individual, imposing years of disability and compounding the financial burden on those affected, their families, health systems and national economies.[4] **Such a threat to the safety and well-being of individuals and society requires an urgent, integrated and multisectoral policy response**.

A comprehensive response to NCDs

The global policy response to NCDs has historically focused on the four primary NCDs causing premature death – cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases – and four main modifiable risk factors – tobacco and alcohol use, unhealthy diet, and physical inactivity. In 2018, the World Health Organization (WHO) and the United Nations (UN) included mental health and air pollution as core components of the NCD response, which is now informally referred to as the '5x5' approach. **In addition, there are a range of conditions that share hallmarks and common risk factors with the most prominent NCDs, and which can benefit from common actions. These conditions include eye diseases, as recognised in the UN Political Declaration on NCDs in 2011.**

Since 2011, governments have adopted a series of bold political commitments to guide the NCD response – including the aforementioned 2011 UN Political Declaration on NCDs, the WHO global NCD targets for 2025, the 2014 UN Outcome Document on NCDs and the 2018 UN Political Declaration on NCDs. Furthermore, NCDs have been recognised and integrated into the Sustainable Development Goals (SDGs) and the 2019 UN Political Declaration on Universal Health Coverage (UHC), emphasising that **UHC packages including NCD prevention and control policies are essential approaches to ensure healthy lives and well-being for all.** Yet, even with the numerous commitments and rhetoric to address NCDs, progress to date has been insufficient and uneven.

Drawing upon the expertise of **The Fred Hollows Foundation**, this policy brief explores the impact of preventable eye health conditions in society and health systems, and aims to identify key barriers and opportunities for the integration of people-centred eye care into UHC and NCD prevention and control programmes.

< A physician examines the eyesight of a patient.

Avoiding disease siloes: Health systems for all people

Despite numerous global commitments, over a quarter of the 194 countries featured in the WHO NCD Progress Monitor 2020 do not have a multisectoral national NCD plan in place, and one-third of countries lack time-bound national NCD targets to drive and monitor progress in NCD outcomes.[1] Moreover, NCD monitoring mechanisms are focused on the measurement of mortality rates while data on NCD morbidity and disability are too often overlooked, thereby not reporting the full burden of NCDs on people, societies, and health systems. **When considering NCD morbidity and mortality together by measuring the total disability-adjusted life years (DALYs) due to NCDs, an estimated 46% of the global NCD burden is due to conditions other than the four most prominent NCDs, including vision loss.**[5]

***Disability-adjusted life years** (DALYs) are a measure of overall disease burden, expressed as the number of healthy years of life lost due to ill health, disability or premature death.*

To accelerate progress, people must be at the heart of the NCD response. Addressing the NCD burden requires delivering comprehensive care for each disease, but it is equally important to look at the person seeking care holistically and recognise the interactions between different health conditions and risk factors, including multi-morbidities with infectious diseases such as COVID-19, tuberculosis, HIV/AIDS or infectious eye diseases (i.e. trachoma). This involves leveraging the overlapping nature of some prevention and treatment interventions, facilitating screening and diagnostic services, and promoting the well-being of people. **Strong health systems need to identify integrated care packages to respond to the increasing burden of NCDs and multi-morbidities, and to span the full continuum of care that is needed across the lifecourse.**

As the first gateway for people at risk of or living with NCDs, **primary health care (PHC) must form the basis of a strong health system and a core element of UHC design and implementation.**

UHC means that all people, everywhere, can access quality health services without incurring financial hardship; and PHC is among the most common entry points for people to the health system, especially for those living in rural and remote communities.

PHC should therefore provide a key coordination role for people to access a comprehensive and effective portfolio of health services when needed – making the best use of resources available, especially in countries where these are most limited. Investment in health and implementation of UHC should be a priority for countries to ensure better access to affordable, quality health services for all populations (including those that are rural, remote, and disadvantaged) and to reduce out-of-pocket expenditures.

Eye health

Globally, at least **2.2 billion individuals are living with vision impairment or blindness,** of which one billion cases could have been prevented or are yet to be treated.

A patient undergoes an eye exam.

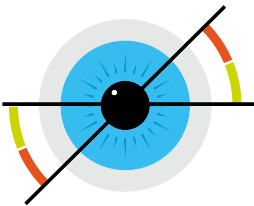
Vision plays a critical role in every stage and facet of our lives. Vision is often taken for granted, but when it is impaired, people often find it difficult to move about safely, read and write, participate in school, work, and be involved in their communities. Vision impairment occurs when an eye health condition affects the visual system and one or more of its vision functions, and has serious consequences for the individual across their lifecourse. Typically, vision impairment is defined and measured using visual acuity, categorising it as mild, moderate or severe distance vision impairment, near vision impairment or blindness. However, vision loss, including for the vast majority of people experiencing vision impairment and blindness, can often be prevented or treated and its consequences mitigated by timely access to quality eye care and rehabilitation.[6]

Over the last two decades, communicable eye diseases have received significant global attention and funding. For example, the proportion of people who are blind due to infectious eye diseases has been reduced dramatically from 20% to only 2%. However, global efforts to address NCDs have largely missed the major social and economic impacts of noncommunicable eye health conditions. As a result, the proportion of preventable and treatable blindness due to noncommunicable eye health conditions has increased.[7] With at least 2.2 billion people living with vision impairment or blindness in the world, and knowing that 1 billion of these people have a vision impairment or blindness that could have been prevented or treated, **eye care should be integrated into the NCD and UHC responses through cost-effective interventions.**

Many eye health conditions are NCDs

Some of the most common eye health conditions are NCDs. NCDs are defined by WHO as diseases that tend to be of long duration and that result from a combination of genetic, physiological, environmental, and/or behavioural factors.[8] A number of eye health conditions fall within this definition and can emerge over a person's lifetime.

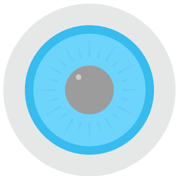
These include:[9]



REFRACTIVE ERROR

A problem with the focusing of light on the retina due to a mismatch between the optical components of the eye and the length of the eyeball, i.e. myopia; or the inability of the eye to focus light at near onto the retina due to aging, i.e. presbyopia.

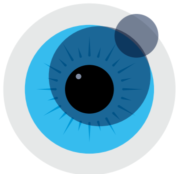
Uncorrected refractive error is the leading cause of moderate to severe vision impairment across world regions, having a significant socioeconomic impact on society, and is correctable with a pair of spectacles.



CATARACT

Clouding of the lens in the eye leads to increasingly blurred vision and can affect one or both eyes.

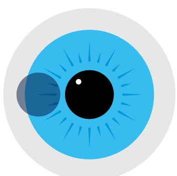
Cataract is the leading cause of blindness globally, particularly in developing countries, despite existing cost-effective interventions to treat cataracts.



GLAUCOMA

A progressive damage to the optic nerve, often associated with raised pressure in the eye.[10]

Glaucoma is the third-leading cause of blindness globally and must be detected before people themselves notice a problem.



AGE-RELATED MACULAR DEGENERATION (ARMD)

Damage to the central part of the retina responsible for detailed vision (macula), causing blurred, distorted or no vision in the centre of the visual field.[6,11]

ARMD is the third leading cause of moderate to severe vision impairment across the world.

The complex relationship between eye health conditions and other NCDs

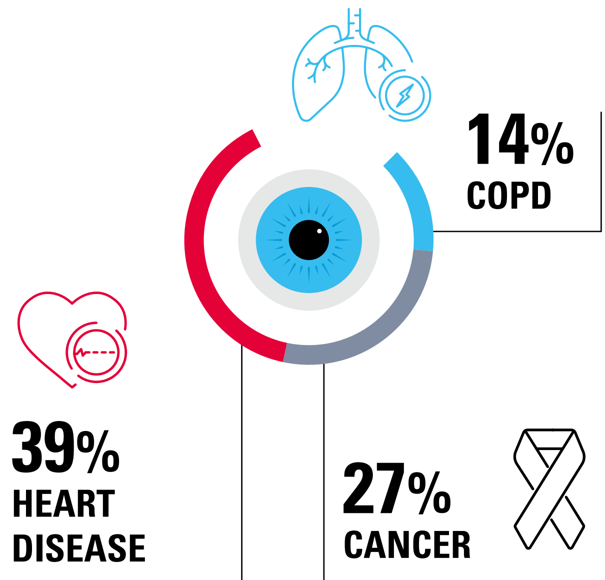
The most common noncommunicable eye health conditions often manifest in individuals with other NCDs. Recent studies have shown that people with vision loss or eye health conditions are more likely to have other NCDs than people with good vision. For example, a series of population-based studies in high-income countries revealed that 14% of people with vision loss had chronic obstructive pulmonary disease (COPD), 27% had cancer, and 39% had heart disease.[11] However, the relationship between eye health conditions and other NCDs is complex and more research is needed.[12]

NCD co-morbidities occur when more than one NCD manifest in the same individual at the same time, which may share common risk factors or because some diseases predispose individuals to developing others.

NCD multi-morbidities refer to the presence of two or more NCDs without necessarily a causal link or a primary condition.[13,14]

PEOPLE WITH VISION LOSS HAD OTHER NCDS

From a series of population-based studies in high-income countries



A focus group discussion about glaucoma. Nigeria

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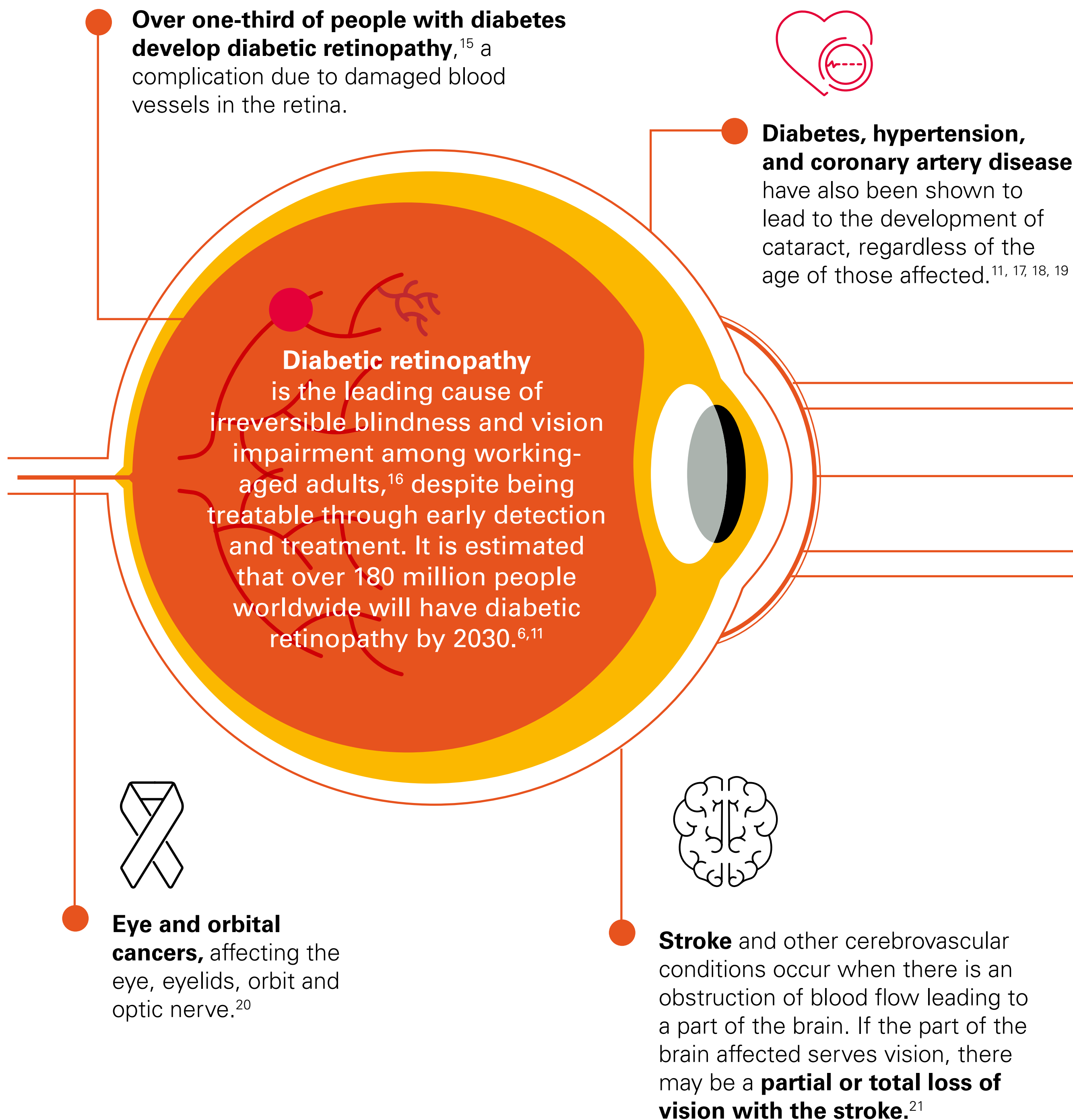
The main NCDs can lead to eye health conditions and vice-versa

Several of the most prevalent NCDs can lead to eye health conditions if not addressed in a timely manner, and vice-versa.



Approximately a quarter of people with the autoimmune condition called **Grave's disease** are affected by *thyroid eye disease,* which damages the tissues around the eye and leads to a variety of eye problems.[22]

Other immune diseases such as *sarcoidosis,* a systemic disorder which has inflammatory manifestations and affects the eyes in 25% to 60% of patients, lead to complications **including severe visual impairment or even blindness.**[23]

The link between **vision loss** and poor **mental health** is well-established. Studies have shown that 25% of people living with blindness or vision impairment have depression, and that the prevalence of depression is related to the severity of vision loss and to the existence of multi-morbidities.[11, 24 ,25]

Vision impairment has also been linked to **dementia** and **Alzheimer's disease,** although a causal link has not been established, evidence suggests that glaucoma is twice as common in geriatric patients with Alzheimer's disease compared to those without this debilitating condition, and that there is a two-fold increased risk of dementia in people with vision impairment. Consequently, retinal biomarkers are being explored as biomarkers for dementia, and this is an active area of research.[11, 26, 27, 28, 29]

Other neurological disorders, such as *myasthenia gravis* which often leads to **ptosis** (drooping upper eyelids) due to skeletal muscle weakness; or *idiopathic intracranial hypertension* which may produce **double vision** and **visual obscuration** due to intracranial pressure and is closely linked with the global burden of obesity.[30, 31]

Common risk factors for NCDs and eye health conditions

Major NCDs, including eye health conditions, are highly preventable and treatable and share common modifiable risk factors.

TOBACCO USE

ALCOHOL USE

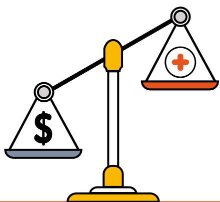
UNHEALTHY DIET

PHYSICAL INACTIVITY

AIR POLLUTION[32]

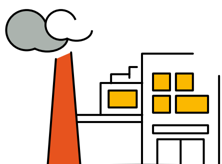
By addressing these risk factors and other associated conditions (such as hypertension and obesity) through a shared approach in prevention interventions together with timely screening, diagnosis, and treatment, the years of disability due to eye health conditions and other NCDs can be prevented or substantially reduced, also supporting the creation of health-promoting environments.

Other drivers of NCDs and eye health conditions



Social, commercial and environmental determinants of health

Socioeconomic inequalities within communities, unregulated marketing of unhealthy commodities and stronger sun exposure are examples of determinants that can exacerbate the incidence of NCDs and eye health conditions.



Urban life

Rapid urbanisation is associated with higher exposure to NCD risk factors such as poor air quality, higher levels of physical inactivity and more time spent indoors, which can result in a higher prevalence of refractive error.

Ageing

Population ageing is significantly contributing to the number of people living with NCDs – including noncommunicable eye health conditions and vision loss – and there is a need for effective policies to promote healthy ageing across the lifecourse.[11]

Medication use

There is evidence that often long-term medication used for some NCDs can cause cataracts, i.e. diuretics for hypertension or steroids for COPD.[33, 34] Without the right medical advice, people living with NCDs that are not able to stop their use of these medications can have an increased risk of developing the leading cause of preventable blindness without knowing about it.

© Jonathan Camuzo

Villagers get a free eye exam in a local school by opticians and ophthalmologists working with local and international NGOs. India - Tamil Nadu state - Trichy district

POLICY RECOMMENDATIONS

Driving greater coordination and collaboration between NCDs and eye care will be essential to curb the rise in blindness and vision impairment around the world, tackle NCD complications and co-morbidities and address common risk factors. Key measures will be to:

- **Strengthen collaboration** across the eye health and NCD sectors to develop joint strategies, improve robust referral pathways, exchange knowledge and expertise, and define complementary responsibilities in supporting people living with NCDs and eye health conditions.
- **Implement WHO 'Best Buys'** and other recommended cost-effective interventions, including the WHO Package of Eye Care Interventions to include measures to reduce tobacco use, address unhealthy diets, manage diabetes and undergo regular eye examinations.
- **Implement community-based initiatives**, such as school and workplace education programmes to raise awareness about NCD risk factors and the importance of early identification of eye health conditions and other NCDs, engaging and empowering communities to reduce their exposure to health-harming products and gain access to health services.
- **Promote and support research** that further investigates the complex relationship between eye health conditions and other NCDs and on effective integrated prevention and control responses, especially in LMICs.

The role of primary health care and Universal Health Coverage for NCDs

As with many other NCDs, eye health conditions are often associated with older people; however, they can emerge early in life due to exposure to risk factors. For instance, a deficit of Vitamin A causes vision impairment in children, and preterm birth can have serious consequences for vision as well as overall health in childhood.[6] **In order to fully implement effective measures to prevent and treat eye health conditions and other NCDs across the lifecourse, health systems need to be based on a solid primary health care (PHC) network accessible for all under the principle of Universal Health Coverage (UHC).**

"Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community ***through their full participation and at a cost that the community and country can afford to maintain at every stage of their development*** *in the spirit of self-reliance and self-determination."*

Declaration of Alma-Ata, International Conference on PHC, September 1978

© trinitycarefoundation

School students participate in a preventive health programme providing eye exams in government schools. India - Karnataka state

Although the road to achieving UHC varies from country to country, this journey must start with the provision of essential PHC services and span the full continuum of care across the lifecourse, **from health promotion, disease prevention, screening and diagnosis to treatment and care, rehabilitation, and palliative care**. UHC also means health services must be people-centred, focusing on individuals' health outcomes and equipping people with the knowledge and tools to understand and actively manage their health.[35]

UHC is undermined by lack of access to prevention and treatment of eye care services for approximately one billion people worldwide. There is a shortage of eye care at the PHC level in LMICs.

Most eye care services have an acute and curative focus and are delivered at the secondary and tertiary levels of the health system. In addition, the cost of eye care services in many countries can push households into vicious cycles of poverty.[36]

In an effort to tackle the economic and societal burden of the rising number of people living with vision impairment and blindness, the 73rd World Health Assembly in 2020 adopted a resolution on 'Integrated people-centred eye care, including preventable vision impairment and blindness'. It acknowledges the existence of cost-effective eye interventions covering promotion, prevention, treatment and rehabilitation at PHC level, and the need for their integration into health systems as part of countries' pathways towards UHC.[37]

POLICY RECOMMENDATIONS

To prioritise and orient the focus towards PHC to achieve UHC for addressing NCDs and eye health conditions, steps must be taken to:

- Systematically **adopt a person-centred approach to health services** that ensures the early identification of people at risk of or living with NCDs, including eye health conditions, and supports them to effectively manage and monitor risk factors, complications, and multi-morbidities.
- Ensure health systems **prioritise the development of primary and community care services** that can provide affordable NCD care through financial risk protection, including screening and treatment for eye health conditions to reduce social and health inequities, especially in LMICs.
- **Integrate eye health checks within PHC clinics providing NCD care,** and involve governments, medical associations, service providers and patient organisations in these efforts.
- **Strengthen supply chains and health systems** to increase access to affordable, safe, effective, and quality medicines for the treatment of eye health conditions and NCD care, especially for the management of diabetes and cardiovascular health – for instance, through effective pooled procurement mechanisms that reduce corruption and yield cost savings.

Integrated people-centred care for NCDs and eye health

If no further action is taken by governments, the global burden of blindness will triple by 2050, and up to half of the world's population will be living with some form of vision impairment.[EB146.R8]

Currently, eye care is poorly integrated in health systems. Instead, vertical disease-specific programmes have often been introduced to address certain eye health conditions in many LMICs. However, such programmes neither address patients' changing needs over time nor respond to the increasing burden of NCD multi-morbidities with eye diseases. Furthermore, in most LMICs, national health strategies do not include strategic plans for eye care, and they are therefore not considered in the planning and budgeting of services.[6]

Governments must prioritise the building of multidisciplinary healthcare teams and ensure the integration of priority NCD interventions – including eye care services – in national health programmes to counter "silo-effects" and improve outcomes for patients, especially those with multi-morbidities.

© Vision Spring

People in rural and peri-urban areas can benefit from programmes providing eye exams and access to affordable glasses.

Integrated people-centred eye care (IPEC) is an approach to eye care delivery that creates linkages between eye care and other health programmes and facilitates the strengthening of all building blocks of the health system. IPEC addresses the full spectrum of eye health conditions according to people's needs and throughout their lifecourse. Its implementation is based on four strategies:

1. Empowering and engaging people and communities;
2. Reorienting the model of care towards primary and community care;
3. Coordinating services within and across sectors; and
4. Creating an enabling environment.

The successful integration of eye care services into health programmes would, for example, help ensure the early detection and timely treatment of diabetic retinopathy through periodic screening of individuals living with diabetes.[6]

POLICY RECOMMENDATIONS

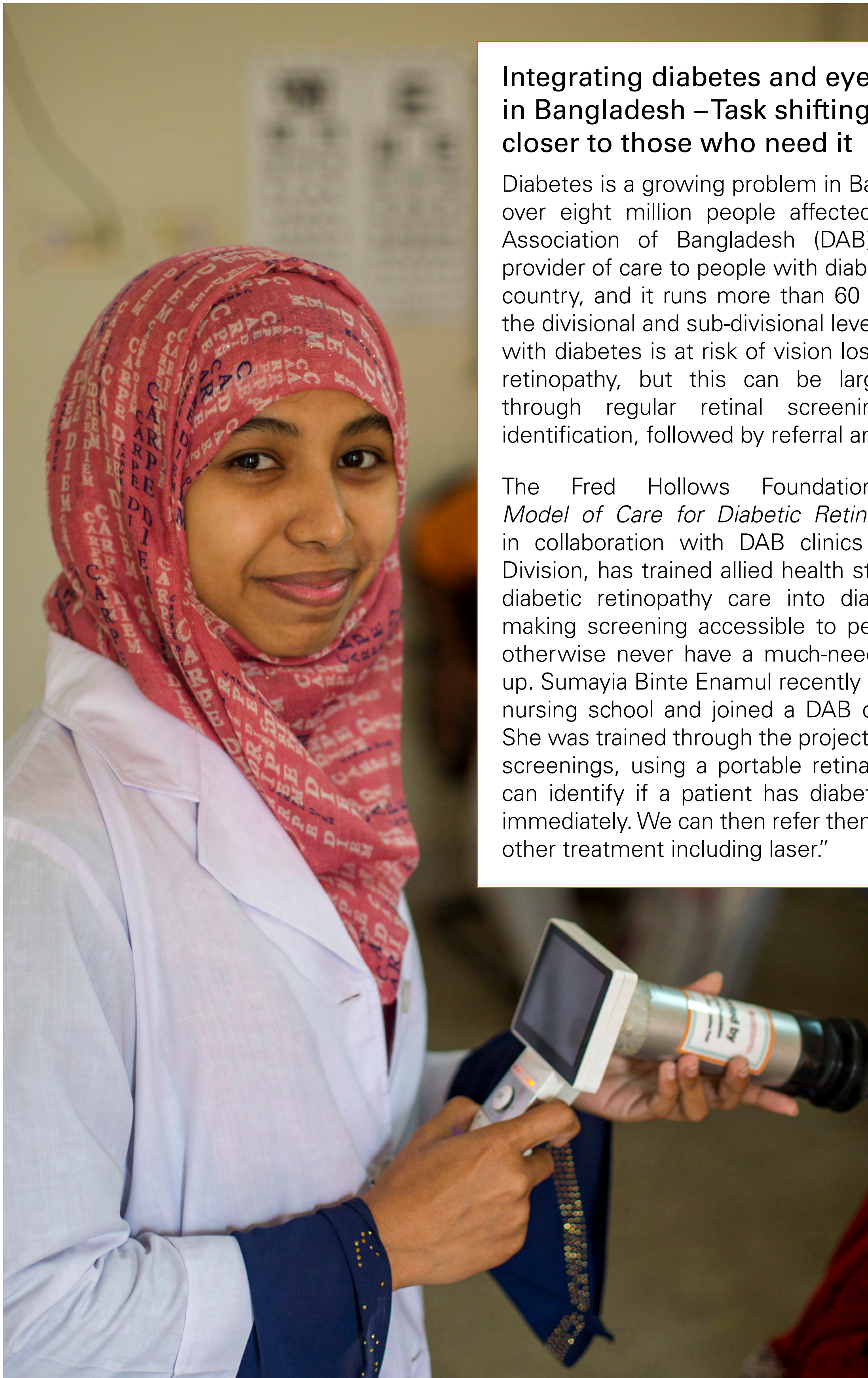
The recently released WHO World Report on Vision (2019),[6] as well as the aforementioned 73rd World Health Assembly resolution, argues for the implementation of IPEC as the centrepiece for the future of eye health. The Report sets out five key recommendations around IPEC that can be aligned with and integrated within NCD prevention and care efforts:

- **Ensure NCDs, including eye health conditions, are an integral part of efforts to achieve UHC,** particularly in collecting and reporting information on met and unmet needs, improving access and financial risk protection for priority interventions, defining quality assurance measures and reporting on effective coverage.
- **Implement measures to achieve integrated people-centred care across all levels of the health system for NCDs**, including eye health conditions, especially integrating eye care into national health and NCD strategic plans and budgets; across other sectors such as education, labour and social services; across workforce planning, health financing and health information systems; and across the continuum of services for health promotion, prevention, treatment, rehabilitation and palliation.
- **Promote high-quality implementation and health systems research** to sustain delivery of integrated people-centred care for all NCDs, including costs and benefits of care and in monitoring the impacts of technological innovations, at both the individual and societal level.
- **Monitor trends and evaluate progress** towards implementing integrated people-centred care and its impact, particularly strengthening national capacity to collect, disaggregate, analyse and utilise performance data against defined indicators, and in conducting surveys on the prevalence and causes of NCDs and eye health conditions at the population level.
- **Raise awareness, engage and empower people and communities** on the importance of prevention and early intervention, on the availability and access of information and services, and on the human rights of people living with NCDs, including people who are blind or vision impaired.

Integrating diabetes and eye health care in Bangladesh – Task shifting brings care closer to those who need it

Diabetes is a growing problem in Bangladesh, with over eight million people affected. The Diabetic Association of Bangladesh (DAB) is the main provider of care to people with diabetes across the country, and it runs more than 60 static clinics at the divisional and sub-divisional level. Every person with diabetes is at risk of vision loss from diabetic retinopathy, but this can be largely prevented through regular retinal screening for timely identification, followed by referral and treatment.

The Fred Hollows Foundation's *Integrated Model of Care for Diabetic Retinopathy* project, in collaboration with DAB clinics in the Barisal Division, has trained allied health staff to integrate diabetic retinopathy care into diabetes care by making screening accessible to people who may otherwise never have a much-needed eye check-up. Sumayia Binte Enamul recently graduated from nursing school and joined a DAB clinic in Barisal. She was trained through the project to perform eye screenings, using a portable retinal camera: "You can identify if a patient has diabetic eye disease immediately. We can then refer them to hospital for other treatment including laser."



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A young nurse holds a portable retinal camera.

Addressing NCDs and eye health conditions as a component of sustainable development

Like other NCDs, the burden of eye health conditions, vision impairment, and blindness is not borne equally; it is far greater in LMICs, in women, among older people, and in rural and marginalised communities.[6]

Acknowledging the intersection between NCDs and eye health can accelerate achievement of the **Sustainable Development Goals (SDGs)**. Failure to prevent premature death and disability due to NCDs and treat avoidable blindness and vision impairment is viewed as a failure of the SDG's guiding principle to 'leave no one behind'.

The SDGs provide a global blueprint to end poverty and achieve sustainable development worldwide by 2030, ensuring that no one is left behind. In addition, the sustainable provision of health care, including eye care services involves actors within and outside the health sector.

SUSTAINABLE DEVELOPMENT GOALS

Although efforts to improve NCDs and eye health contribute most significantly to **SDG 3 - Good Health and Wellbeing,** there are important intersections between increasing access to eye and NCD care services and other goals:[38,39]

SDG 1
NO POVERTY

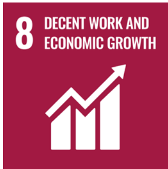
Addressing eye health conditions, vision impairment, and blindness will improve quality of life and reduce poverty.

SDG 4
QUALITY EDUCATION

Education and literacy, particularly for health, are essential for early detection and reducing exposure to common NCD risk factors.

SDG 5
GENDER EQUALITY

Women and girls are disproportionately affected by NCDs and their risk factors, and the strategic provision of eye and NCD care can reverse protracted issues of gender inequality.



SDG 8
DECENT WORK AND ECONOMIC GROWTH

Increasing access to quality eye and NCD care and investing in healthy workplaces promote full and productive employment.

SDG 10
REDUCED INEQUALITIES

Empowering marginalised populations to access affordable, equitable and essential health services and medicines will ensure no one is left behind.

SDG 12
RESPONSIBLE CONSUMPTION AND PRODUCTION

Sustainable procurement for the delivery of eye and NCD care is essential to improve the effective usage of resources and services.

SDG 13
CLIMATE ACTION

Understanding the health impacts of climate breakdown is key to address both climate change and NCDs through mutually beneficial interventions.

SDG 17
PARTNERSHIPS FOR THE GOALS

Effective public-private partnerships should be explored as a means of increasing access to eye and NCD care services.

POLICY RECOMMENDATIONS

Acknowledging and advancing NCDs and eye care as essential cross-cutting issues will be critical to achieving the SDGs. Steps must be taken to:

- **Fully incorporate NCDs including eye health needs into SDG strategies** and monitoring frameworks within health policies, and as an important cross-cutting issue beyond health.
- **Recognise the need for a 'health in all policies' approach** that integrates NCD and eye health needs across different policy areas such as finance, education, social services, labour, transport and environment.
- **Harness opportunities to redress protracted issues of inequity and inequality** through the strategic provision of priority eye care services, including prevention programmes, reaching those farthest behind first.

Cross-sectoral collaboration to increase access to services for the female labour force in Vietnam

The Fred Hollows Foundation's Improving Vision to Empower Female Factory Workers is a first-of-its-kind project introducing eye health services in the manufacturing sector in Vietnam, with regular vision testing by trained health staff as well as 'vision corners' at three factories. The 'vision corners' are self-check stations on the factory floors that provide an opportunity for staff, who are mostly women, to self-check visual acuity and seek further care if needed. All factory workers with low vision acuity and eye problems receive comprehensive examinations and eye treatments and visual acuity correction as needed, with support from factory management boards.

Ms Thu Hoa is a 45-year-old factory worker at a shoe manufacturing company in the Quang Nam province who started losing her vision and went through life trying her best to manage the situation until she lost her eyesight completely, impacting her mental health as well. In 2017, through the project, Ms Hoa received access to a comprehensive eye examination, was diagnosed with cataract on both eyes and was referred to DaNang Eye Hospital, where she underwent a free cataract surgery. Now Ms Hoa is back to her usual life and feeling well again. She has become an *ambassador for eye health* at her workplace and in her community.

© Phan Thi Trang

A group of female factory workers engage in a workshop

The role of civil society in overcoming gaps in the current approach to NCDs and eye health

The COVID-19 pandemic has demonstrated that public health services, strong health systems and a resilient health workforce are prerequisites for health security and economic stability, but cannot be built overnight.

© Francisco Àvia_Hospital Clínic

Hospital section treating cases of SARS-CoV-2. Spain

Countries must establish UHC packages, based on strong PHC, that consider and integrate the needs of those living with or at risk of NCDs, including eye health conditions.[6]

Although significant progress has been recorded over the last ten years, there are ongoing challenges in the global response to NCDs, including **gaps in accountability, leadership, investment, care, and community engagement**.[40] These gaps are relevant for consideration when addressing challenges for eye care services.

For example, in addition to the poor integration of eye care services in national health programmes, there is limited availability of important data on eye care, including data for the analysis of inequality.[41] Consequently, existing systems for tracking information on eye care are not properly integrated into the larger health information systems. **The lack of data weakens opportunities to demand accountability and advocate for increased investment in eye care.**

Challenges have also been identified with the **quality, quantity, and distribution of the health workforce for eye care, which can limit the availability of affordable health services for eye care** in the public sector. Therefore, accessing eye care services may put poorer users at risk of catastrophic health expenditure, particularly in LMICs.[6, 36] The rapid rise in NCDs may **impede poverty reduction initiatives** in developing countries, particularly due to the associated household costs related to seeking health care services.

The current global consensus on the importance of UHC and political commitments towards the achievement of the SDGs remain highly relevant opportunities to address gaps in the global NCD response and to scale-up the prevention and control of NCDs, including eye health conditions.

Civil society has a critical role in accelerating action to advance the global health and NCD agenda from local to global levels. Civil society actors and community-led efforts are a critical force to raise public demand for policies, laws and action, address service gaps and ensure that these services reach marginalised populations.

Civil society actors can:

- **Promote targeted research** to build up evidence around the effectiveness of interventions for eye health and NCDs at the PHC level and as part of UHC packages.
- **Raise awareness of eye health conditions within the context of NCDs** and dispel misconceptions around the cost feasibility of solutions to improve eye health. For example, cataract treatment involves a one-off surgery under local anaesthesia, which could be integrated into PHC in developing countries.[6]
- **Advocate for more robust, disaggregated, and integrated data and health information systems** to support national targets and efforts to strengthen health systems and provide affordable and quality access to eye and NCD care.
- **Engage people living with NCDs, including with eye health conditions,** and their carers to provide the insights and knowledge of the lived experience and patient journey that would otherwise be inaccessible to policy makers.
- **Seek greater collaboration between organisations working on eye health conditions and other NCDs** for the promotion and implementation of common solutions; for instance, by joining or helping the establishment of national NCD alliances that can support the implementation of comprehensive national NCD action plans.

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The NCD Alliance (NCDA) is a unique civil society network, uniting 2,000 organisations in more than 170 countries, dedicated to improving NCD prevention and control worldwide. Today, our network includes NCDA members, national and regional NCD alliances, over 1,000 member associations of our founding federations, other global and national civil society organisations (CSOs), scientific and professional associations, and academic and research institutions.

NCDA has a diverse supporter base, including The Fred Hollows Foundation. Together with other strategic partners, including WHO, the UN and governments, we work on a global, regional and national level to bring a united civil society voice to the global campaign on NCDs.

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The Fred Hollows Foundation is a leading international development organisation working towards a world in which no person is needlessly blind or vision impaired. Established in Australia in 1992, the Foundation now works in more than 25 countries and has restored sight to more than 2.5 million people worldwide.

The Fred Hollows Foundation's priority is to work with communities to improve their own eye health. They do this through life-changing surgeries and treatments, training doctors and health workers, generating new ideas and pushing for change at all levels, from global to local. The Foundation's priorities include ensuring effective cataract treatment is accessible to all and finding and adapting affordable, effective solutions for diabetic retinopathy and other eye conditions.

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