



**VISION IMPACT  
INSTITUTE**

With speakers from:



**World Health  
Organization**



**essilor**



*Global State of Vision Care:  
Focus on Africa  
April 17, 2020*

# Agenda

**Welcome & Housekeeping Items**

**Introduction to Vision Impact Institute – Kristan Gross (VII)**

**Open Remarks - Dr. Ayukatong Enowntai Nkongho (AFCO Public Health Committee)**

**World Report on Vision – Alarcos Cieza (WHO)**

**Eliminating Poor Vision in a Generation – Anurag Hans (Essilor)**

**The Changing Landscape of Vision Care in Context of the Reports – Prof Kavin Naidoo (Essilor)**

**Q&A – Kristan Gross (facilitator)**

**Closing Remarks**



## **Kristan Gross**

Global Executive Director, Vision Impact Institute

**ABOUT**



**VISION IMPACT  
INSTITUTE**



# Vision Impact Institute

## About

01

Vision Impact Institute is a **global non-profit** organization established in 2013, focusing on the **impact of poor vision**.

## Mission

02

The mission of the Vision Impact Institute is to raise awareness about the **importance of vision correction and protection** to make good vision a global priority.

## Assets

03

We provide evidence-based Awareness and **Advocacy resources**. We empower and engage global and local change-makers. We offer direct support, advocacy tools and unique database of **500+** **scientific studies** and reports at [visionimpactinstitute.org](https://www.visionimpactinstitute.org)



**VISION IMPACT  
INSTITUTE**

*Giving Vision a Voice®*

## Independent Advisory Board



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Professor and Vice  
Dean for Education, The  
John Hopkins Carey  
Business School - **USA**



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for Eye Health (ICEH) at the  
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and Tropical Medicine - **UK**



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Health, Ophthalmology and Eye  
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## Executive Team



**KRISTAN GROSS**  
Global Executive  
Director – **USA**



**ANDREA KIRSTEN-COLEMAN**  
Global Communications  
Manager – **USA**



**JUDITH WILLIAMS**  
Program Manager  
Americas – **USA**



**EVA LAZUKA-NICOULAUD**  
Director Europe and  
Africa – **FRANCE**



**Dr. Ayukotng Enowntai Nkongho**  
Chair, African Council of Optometry Public Health Committee





## Alarcos Cieza

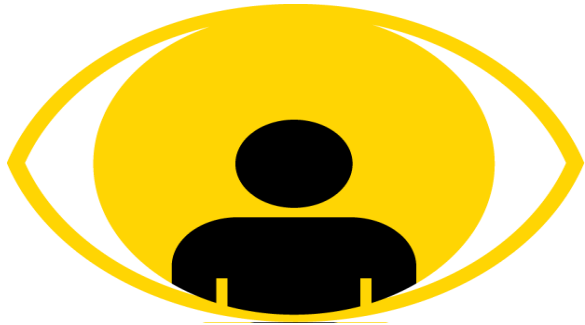
Coordinator, Blindness & Deafness Prevention,  
Disability and Rehabilitation



# World report on vision



# World report on vision



1. Summarizes the best available evidence on the global magnitude of eye conditions and vision impairment
2. Takes stock of progress made, and the remaining challenges facing the eye care sector
3. Outlines a framework for action – integrated people-centred eye care (IPEC) – to address population eye care needs



**World Health  
Organization**

# Progress

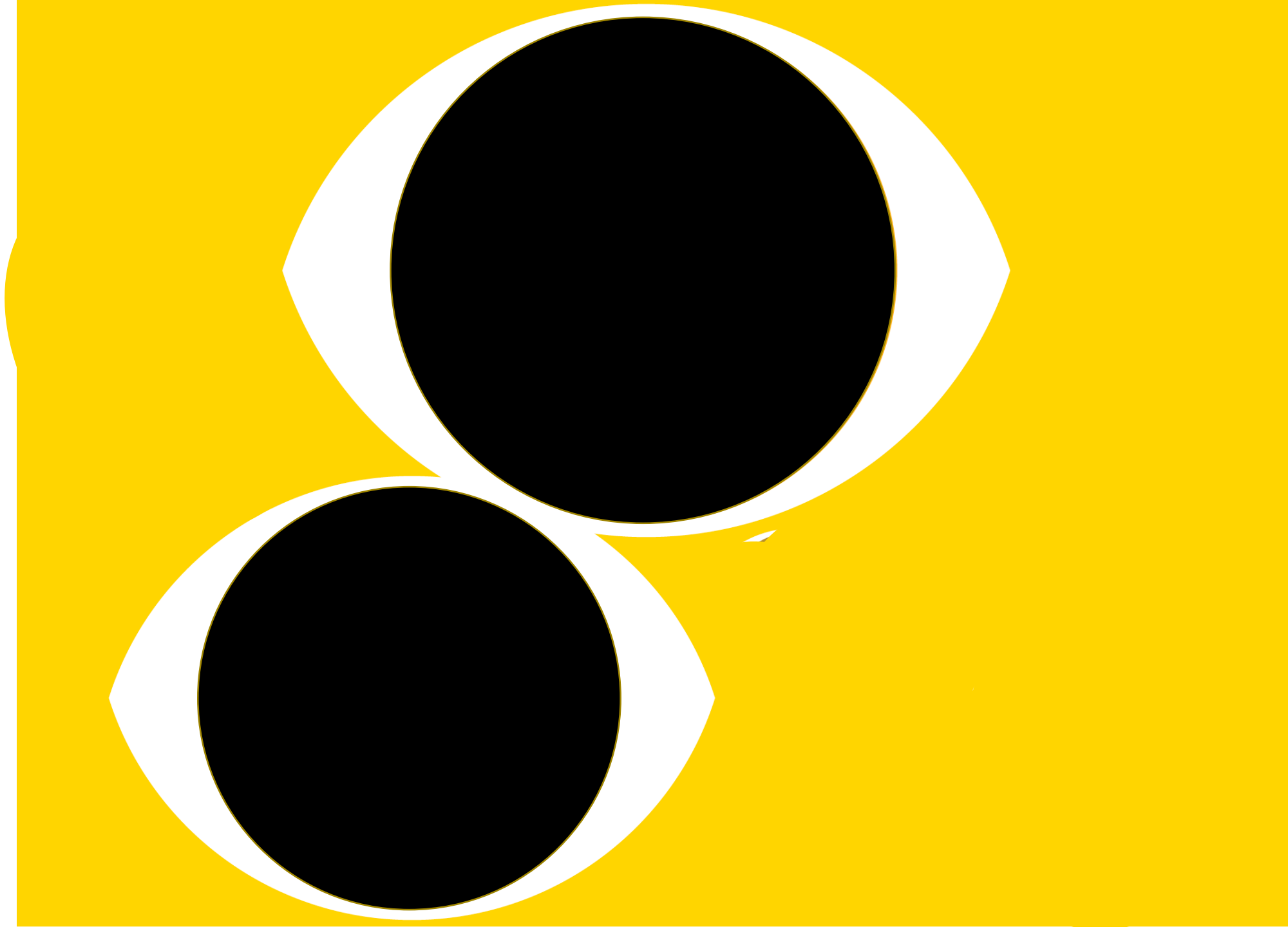


1. Global advocacy efforts launched
2. World Health Assembly resolutions adopted
3. Successful public health initiatives for trachoma, onchocerciasis and vitamin A deficiency
4. Increase in cataract surgery rates in some LMIC
5. Scientific and technical advances

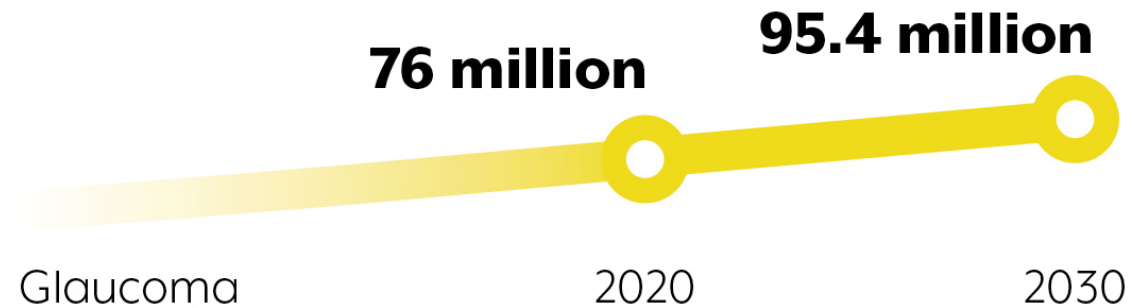
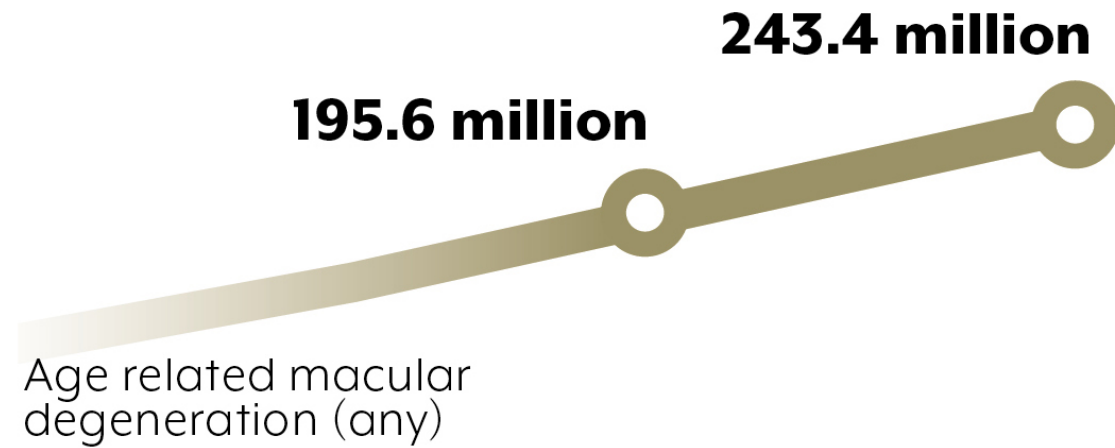
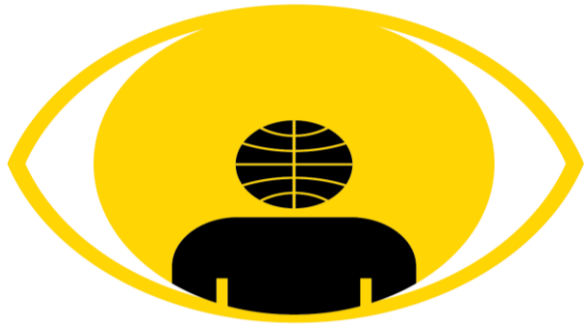
# Challenges



Huge need  
for care



# Changing demographics and lifestyle

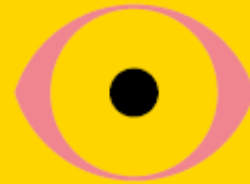


**Eye conditions are projected to increase** due to a variety of factors, including ageing population, lifestyle and NCDs.

## Common eye conditions that do not typically cause vision impairment



**Blepharitis**



**Conjunctivitis**



**Dry eye**



**Chalazion  
and hordeolum  
(stye)**



**Pterygium and  
pinguecula**



**Subconjunctival  
haemorrhage**

- Leading reasons for care seeking
- Lead to personal and financial hardships

# **Vision impairment**



# Vision impairment

**At least 2.2 billion  
have vision impairment**

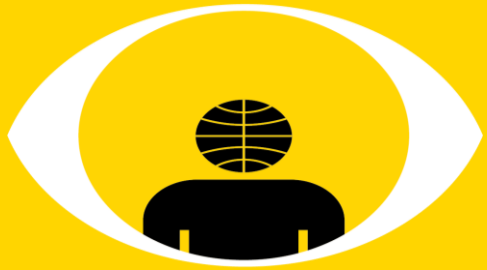
# Vision impairment



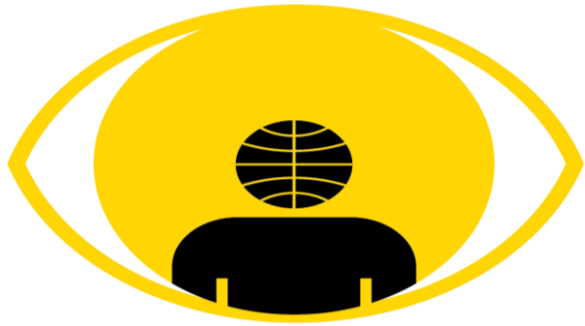
**At least 2.2 billion  
have vision impairment**

**At least 1 billion  
has vision impairment that  
could have been prevented  
or is still to be addressed**

- Corneal opacities (4.2 million)
- Diabetic Retinopathy (3 million)
- Trachoma (2 million)
- Glaucoma (6.9 million)
  
- Cataract (65.2 million)
- Unaddressed refractive error (123.7 million)
- Unaddressed presbyopia (826 million)



# Data is lacking



1. Met eye care needs
2. Health systems and implementation research
3. Global magnitude of eye conditions that do not typically cause vision impairment
4. Weak health information systems

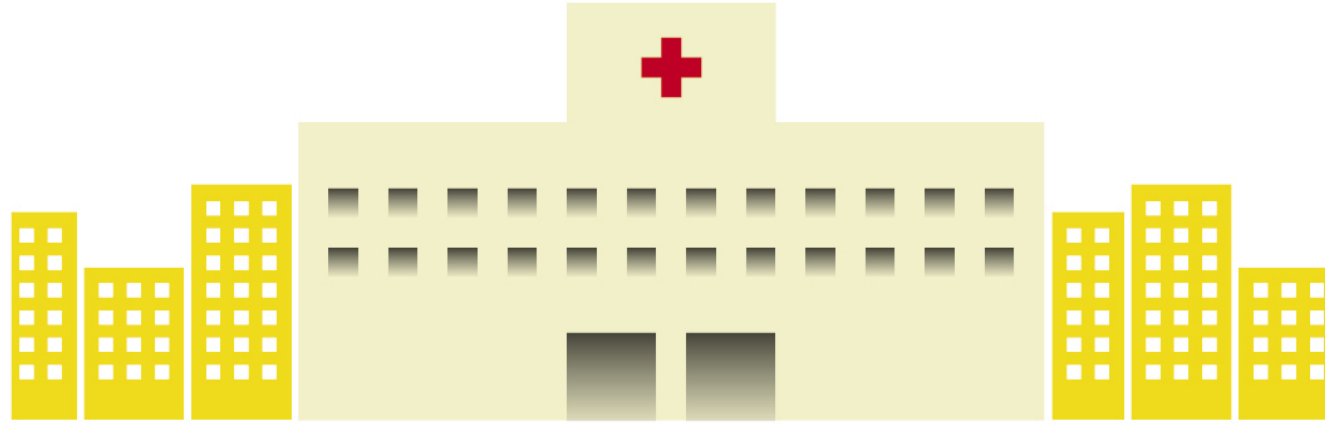


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# ACCESS and BARRIERS to care



# ACCESS



Availability

Accessibility

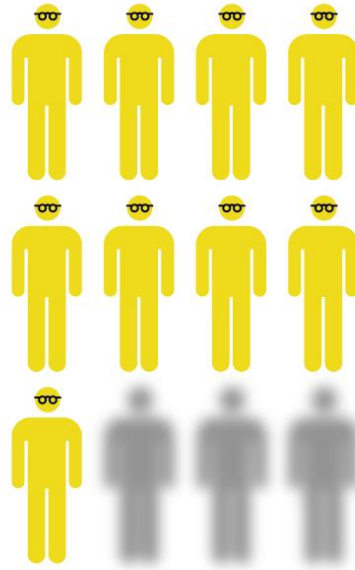
Affordability



# Vision impairment is not distributed equally



low- and middle-income regions



high-income regions

## Unaddressed distance vision

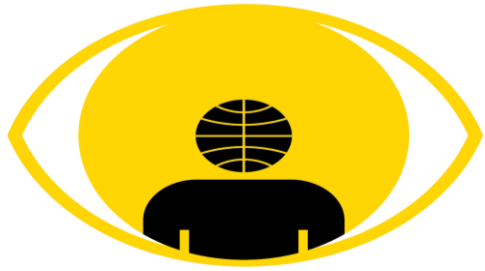
impairment in many low- and middle-income regions is **4x higher** than in high-income regions.

High risk groups often include:

- Rural areas
- Low income
- Women
- Older people
- Indigenous
- Ethnic minorities
- People with disabilities

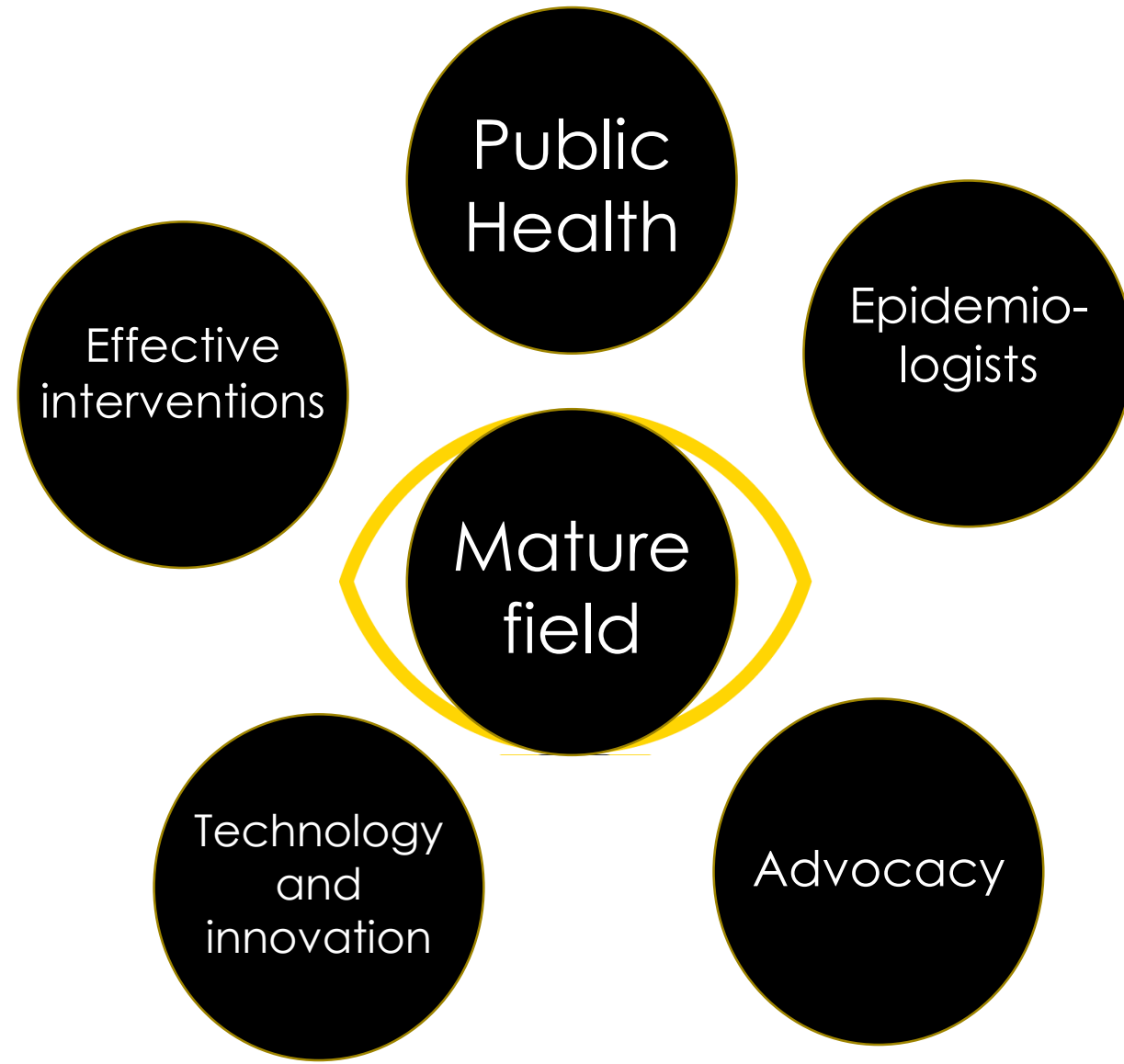


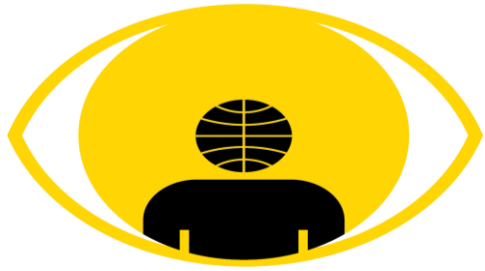
**World Health  
Organization**



How can  
this be?

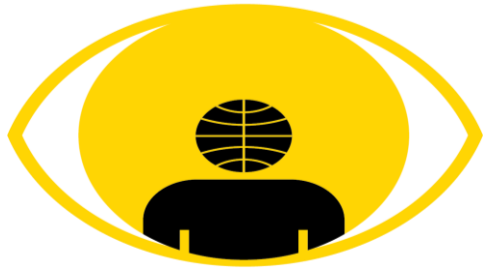






Lack of  
integration

# In the eye-care sector there are...



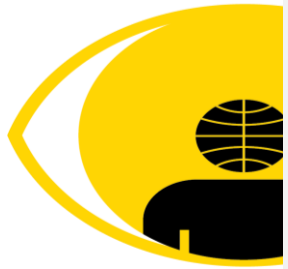
1. Vertical programmes
2. Lack of coordination with the private sector
3. Uncoordinated and unregulated workforce
  - 8/24 countries do not recognize optometry as a profession or do not have educational requirement
4. Eye-care is not part of the health information system



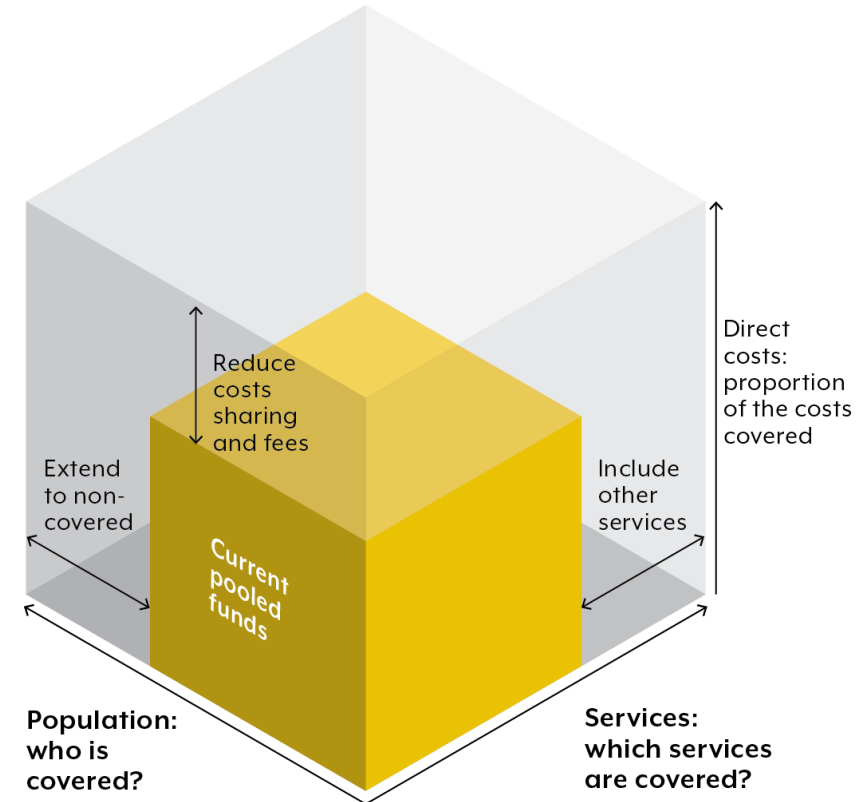
## Priority areas for action

1. Advancing universal health coverage through eye care
2. Implementing integrated people-centred eye care

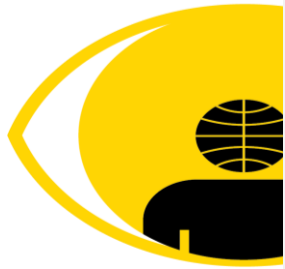
# Universal health coverage



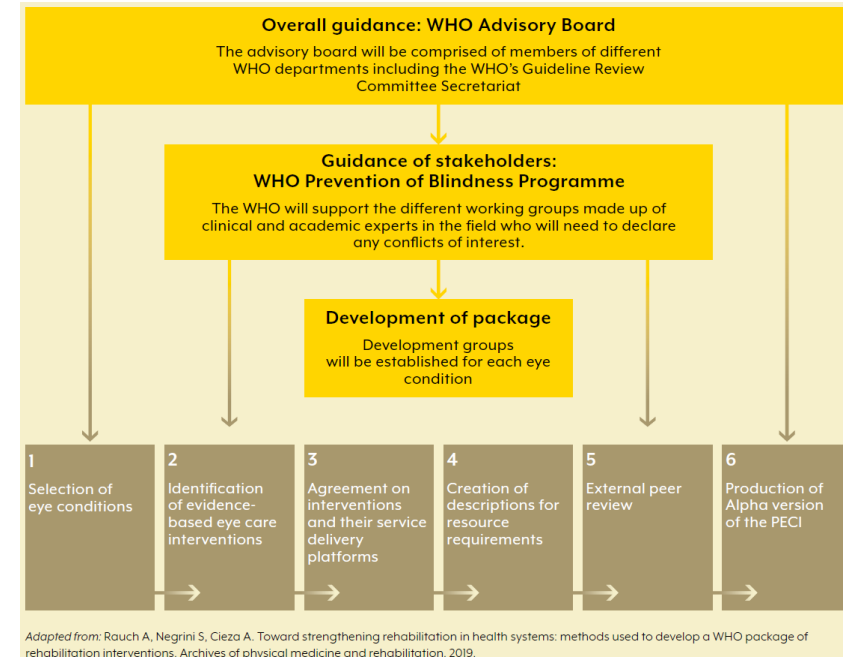
- Provide quality eye care services according to population needs to improve service coverage and reduce inequalities;
- Ensure that the cost of priority eye care interventions are included in service packages covered by pre-paid pooled financing;
- Providing a package of high-quality integrated and people-centred health services.



# Package of eye care interventions (WHO)



- A set of evidenced-based and cost-effective interventions
- Includes resource requirements - assistive products, equipment, medicines, consumables and workforce competencies
- Facilitate the integration of eye care into the health sector and into UHC



# Effective coverage of refractive errors and cataract surgery...

- Considered for inclusion to monitor progress towards UHC.
- The percentage of those in need who receive services of sufficient quality to achieve the desired gain in vision.
- Effective coverage of refractive error:

$$\frac{\textit{Prevalent cases of refractive error with spectacles or contact lenses and a good visual outcome}}{\textit{Prevalent cases of vision impairment and blindness due to refractive error}}$$

# What is integrated people-centred eye care?

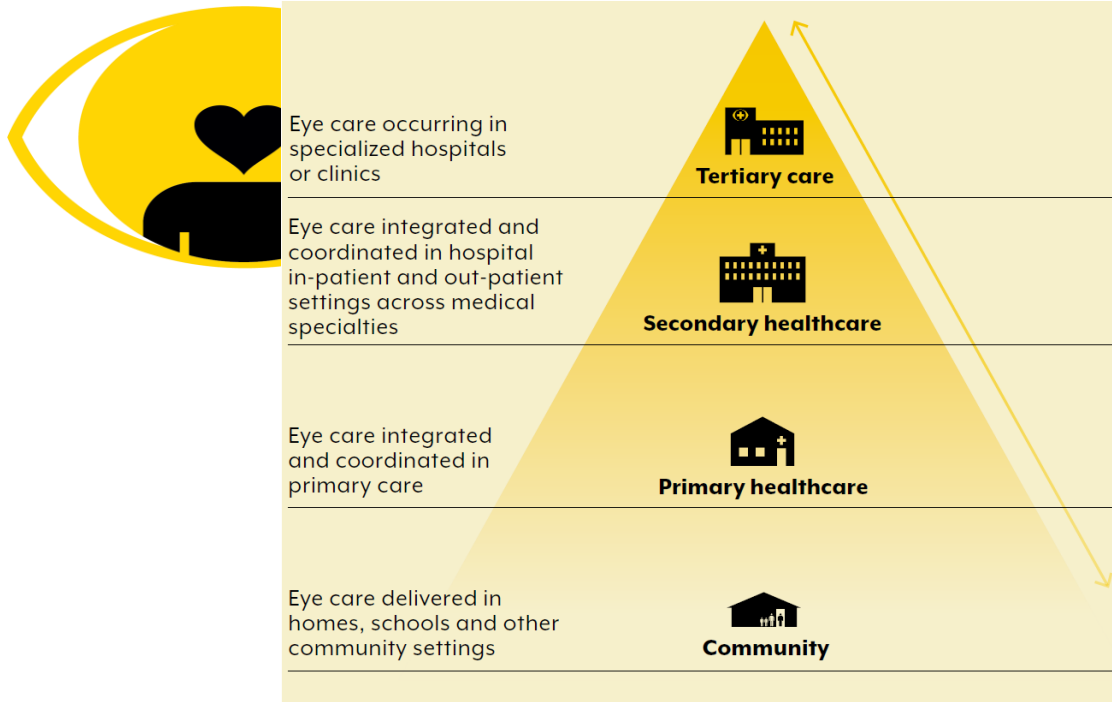
Eye care services that:



- Are managed and delivered so that people receive a continuum of health interventions covering promotion, prevention, treatment and rehabilitation;
- Address the full spectrum of eye conditions according to their need;
- Are coordinated across the different levels and sites of care within and beyond the health sector; and
- Recognize people as participants and beneficiaries of these services, throughout their life course.



# Integrated people-centred eye care: strategies



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

# Recommendations



**Make eye care an integral part of universal health coverage**

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**Implement integrated people-centred eye care in health systems**

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**Promote high-quality research**

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**Monitor trends and evaluate progress**

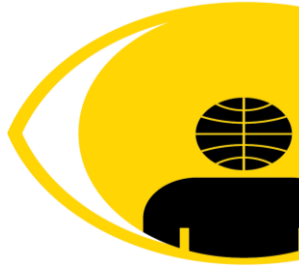
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**Raise awareness and engage and empower people and communities**

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# Upcoming Resolution...



146th session  
Agenda item 12

EB146.R8  
6 February 2020

## **Integrated people-centred eye care, including preventable vision impairment and blindness**

The Executive Board,

Having considered the report on integrated people-centred eye care, including preventable blindness and impaired vision,<sup>1</sup>

RECOMMENDS to the Seventy-third World Health Assembly the adoption of the following resolution:

The Seventy-third World Health Assembly,

Having considered the report by the Director-General on integrated people-centred eye care, including preventable blindness and impaired vision, which summarizes the findings of the *World report on vision*;<sup>2</sup>

Recalling resolutions WHA51.11 (1998) on global elimination of blinding trachoma, WHA56.26 (2003) on the elimination of avoidable blindness, WHA59.25 (2006) and WHA62.1 (2009) on the prevention of avoidable blindness and visual impairment, WHA66.12 (2013) on neglected tropical diseases, and WHA66.4 (2013) entitled "Towards universal eye health: a global action plan 2014–2019";

Mindful of the 2030 Agenda for Sustainable Development, in particular Sustainable Development Goal 3 (Ensure healthy lives and promote well-being for all at all ages), and recognizing the important intersections between eye health and other Sustainable Development Goals, including Goal 1 (End poverty in all its forms everywhere), Goal 4 (Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all), Goal 5 (Achieve gender equality and empower all women and girls), Goal 6 (Ensure availability and sustainable management of water and sanitation for all), Goal 8 (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all), and Goal 10 (Reduce inequality within and among countries);

Recalling the Political Declaration of the High-level Meeting on Universal Health Coverage (2019), including the commitment therein to strengthen efforts to address eye health conditions as part of universal health coverage,

- Approved at 146th Session of the Executive Board (2020)
- Gives effect to the recommendations of the World report on vision

'We have no  
choice but to  
take on this  
challenge'



**Dr Tedros Adhanom Ghebreyesus**

Director-General



# For more information

## World report on vision



<https://www.who.int/publications-detail/world-report-on-vision>

**Full report**

**Executive summary**





## Anurag Hans

Vice President, Base of Pyramid (BoP) Strategy,  
Innovation & Market Acceleration, Essilor



# ELIMINATING POOR VISION IN A GENERATION

What will it take to  
eliminate uncorrected  
refractive errors by 2050?



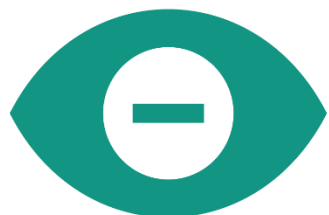
# Eliminating Poor Vision in a Generation

- This report defines the scale of the vision care crisis, as it relates to **uncorrected refractive errors (URE)**, over the **next 30 years** and proposes key priorities, actions and investment needed to sustainably address it.
- It recommends a **partnership approach** to inspire **widespread systems change** via **multi-faceted strategies** addressing public health systems, entrepreneurship, private sector actions and strategic philanthropy.
- **McKinsey & Company** provided **analytical support** for the report, interviewing over 100 experts in eye health, academia and program implementation.

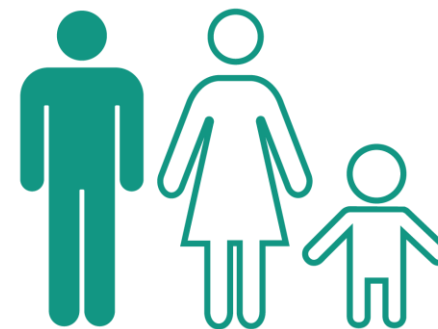


# Poor vision has a real social and economic impact

**Uncorrected poor vision** is the world's **largest unaddressed disability**



**1 in 3 people** are affected by uncorrected poor vision — **90% live in the developing world** at the economic base of the pyramid



Uncorrected poor vision costs the global economy **\$272B in lost productivity every year**



**By 2050**, over **half of the world's population** may be **afflicted** with **myopia** with drastic long-term health implications



# Impairment versus need

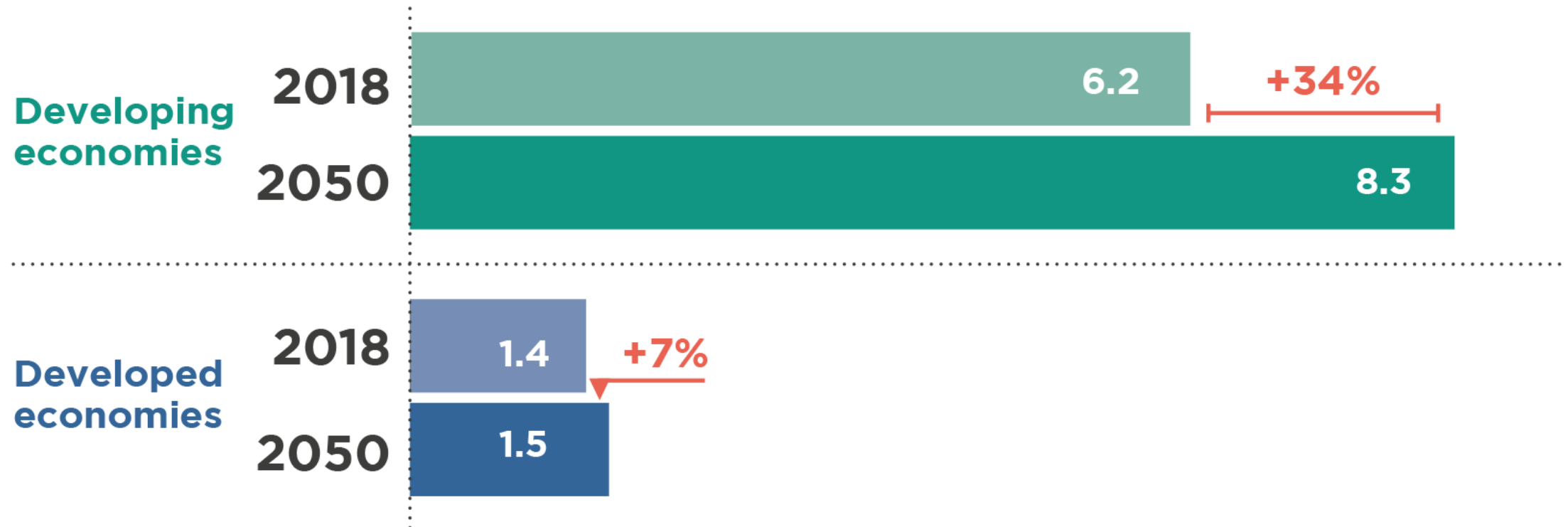
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- **WHO** quantifies vision impairment due to refractive error (RE) based on a **less than 6/12 visual acuity cut off**. This recognizes the resource limitations that public health systems may have as well as the burden on individuals.
- This report estimates the number of people suffering from URE in 2018 as **2.7 billion people**. This is based on a **6/9 visual acuity cut-off** to establish a **need-based model** because:
  - Individuals still battle to see at distance with a 6/12 visual acuity and this limits their ability to work or learn in various circumstances
  - Many individuals present clinically for correction with a 6/12 impairment
  - 6/12 visual acuity is often needed for drivers license and other functions

# Setting the context

## POPULATION GROWTH

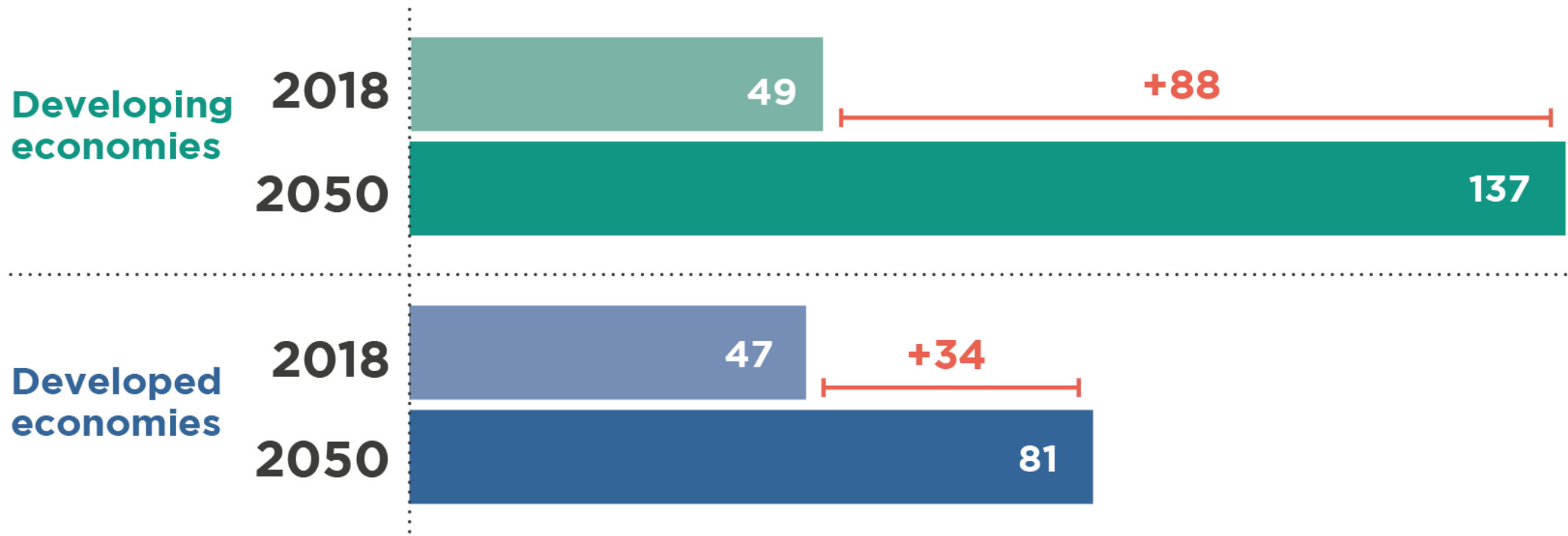
Billions of people



# Setting the context

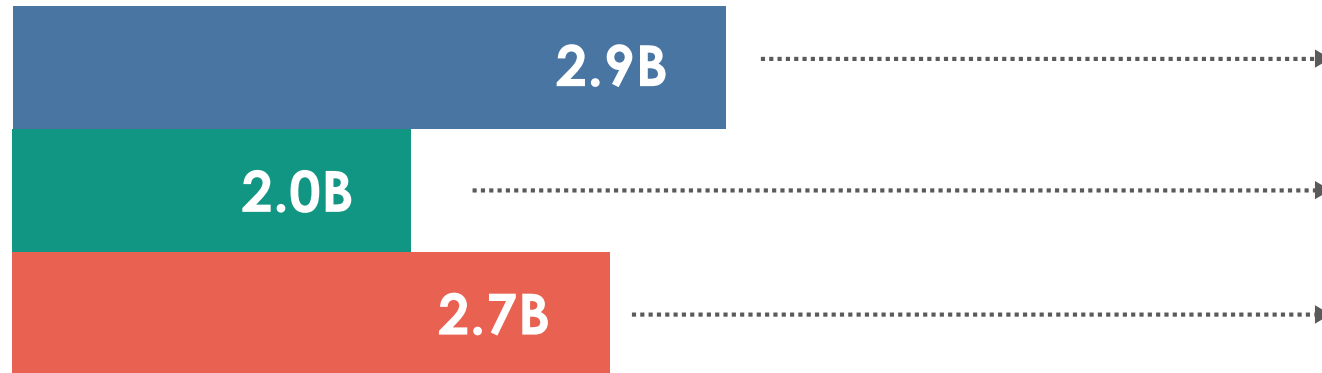
## GDP

Trillion USD, constant 2010 \$



# Global RE burden

## 2018



### Population 7.6B

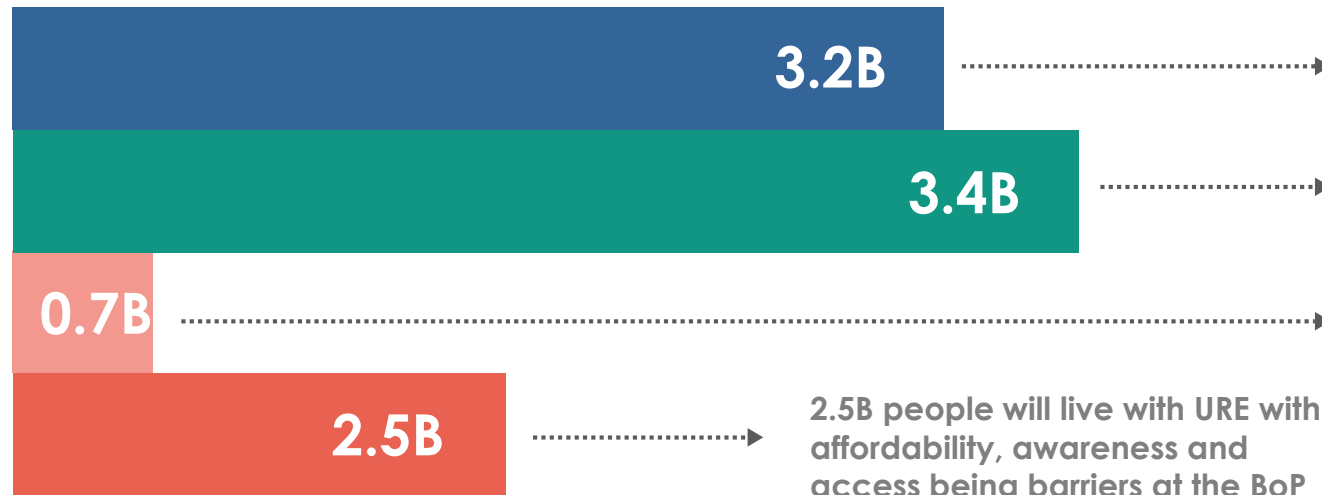
2.9B need no vision correction

2.7B people live with URE – 90 percent of those live in the developing world at the BoP

2.0B people live with corrected RE

## 2050

If the Industry maintains its 2018 focus, serving established markets using similar channels and products:



### Population 9.8B

3.2B need no vision correction

3.4B people will live with corrected RE, having maintained their position in or moved up the economic pyramid to gain affordability, awareness and existing access offered by the industry

0.7B people will continue to live with URE even if they have moved up the pyramid, no longer facing affordability and awareness as barriers but still facing the challenge of access if the industry has not expanded to address this

# RE cases by type

2018

2050

Myopia  
1.5B people suffer from myopia

1.5B

Myopia  
(below 40 years old)

2.2B

Myopia  
2.2B people suffer from myopia

Myopia  
1.0B people suffer from myopia

1.0B

Myopia  
(above 40 years old  
i.e., overlap with presbyopia)

2.1B

Myopia  
2.1B people suffer from myopia

Presbyopia  
1.4B people suffer from presbyopia

1.4B

Presbyopia

1.3B

Presbyopia  
1.3B people suffer from presbyopia

Hyperopia  
0.6B people suffer from hyperopia

0.6B

Hyperopia

0.8B

Hyperopia  
0.8B people suffer from hyperopia

Astigmatism  
0.2B people suffer from astigmatism

0.2B

Astigmatism

0.2B

Astigmatism  
0.2B people suffer from astigmatism

Population  
4.7B

Population  
6.6B  
If current actions are maintained

# But we can solve the issue...

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**\$14B**  
IS NEEDED TO  
CREATE A WORLD  
FREE FROM  
UNCORRECTED  
REFRACTIVE  
ERRORS



**\$2.4B to create sustainable access points**



**\$0.7B to innovate for affordable products**



**\$4.5B to raise awareness**



**\$6.2B to fund subsidized & free services**



# Creating sustainable access points

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**\$2.4B to create 1 million new sustainable access points which will equip 90 percent of the population in need**



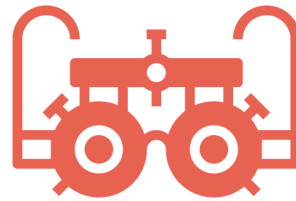
- **600,000** full refraction service points
- **400,000** readers-only points needed

# Innovating for affordable solutions

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**\$0.7B for innovation to accelerate the affordability of cost-to-serve and cost of products**



- **Investment in screening tools** requiring less operator training



- Accelerate the scale-up of **digitization**

# Raising awareness

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**\$4.5B to increase awareness of poor vision and its socio-economic impact at an individual and societal level**



- To **drive demand for glasses** and the uptake of services



- To **drive investment** in new and existing services

# Funding subsidized and free services

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**\$6.2B to fill funding gaps across affordability and access for people unable to pay for services**



- **50%** of wearers in need of subsidized or free services can be **served by sustainable access points**



**TOGETHER WE CAN  
ELIMINATE  
POOR VISION  
BY 2050**



To access the digital report,  
please go to [www.essilorseechange.com](http://www.essilorseechange.com)  
or scan the QR code





## **Prof. Kovin Naidoo**

Vice President, Africa & LATAM, Essilor  
Vision Impact Institute, Governing Board



## The Changing Landscape of Vision Care in the Context of These Reports

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# Studies Show...

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The prevalence of distance vision impairment in low- and middle-income regions is estimated to be four times higher than in high-income regions (1).

With regards to near vision, rates of unaddressed near vision impairment are estimated to be greater than 80% in western, eastern and central sub-Saharan Africa, while comparative rates in high-income regions of North America, Australasia, Western Europe, and of Asia-Pacific are reported to be lower than 10% (2).

1. Bourne et al

2. Fricke et al

# Africa: Current Environment for Eye Care

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Lack of relevance in public health systems

Team approach lacking

Human Resources: Limited numbers and challenges in producing Optometrists and Ophthalmologists

Pockets of success: Lack of scale

# Africa: Public and Private Sectors

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## Public Sector

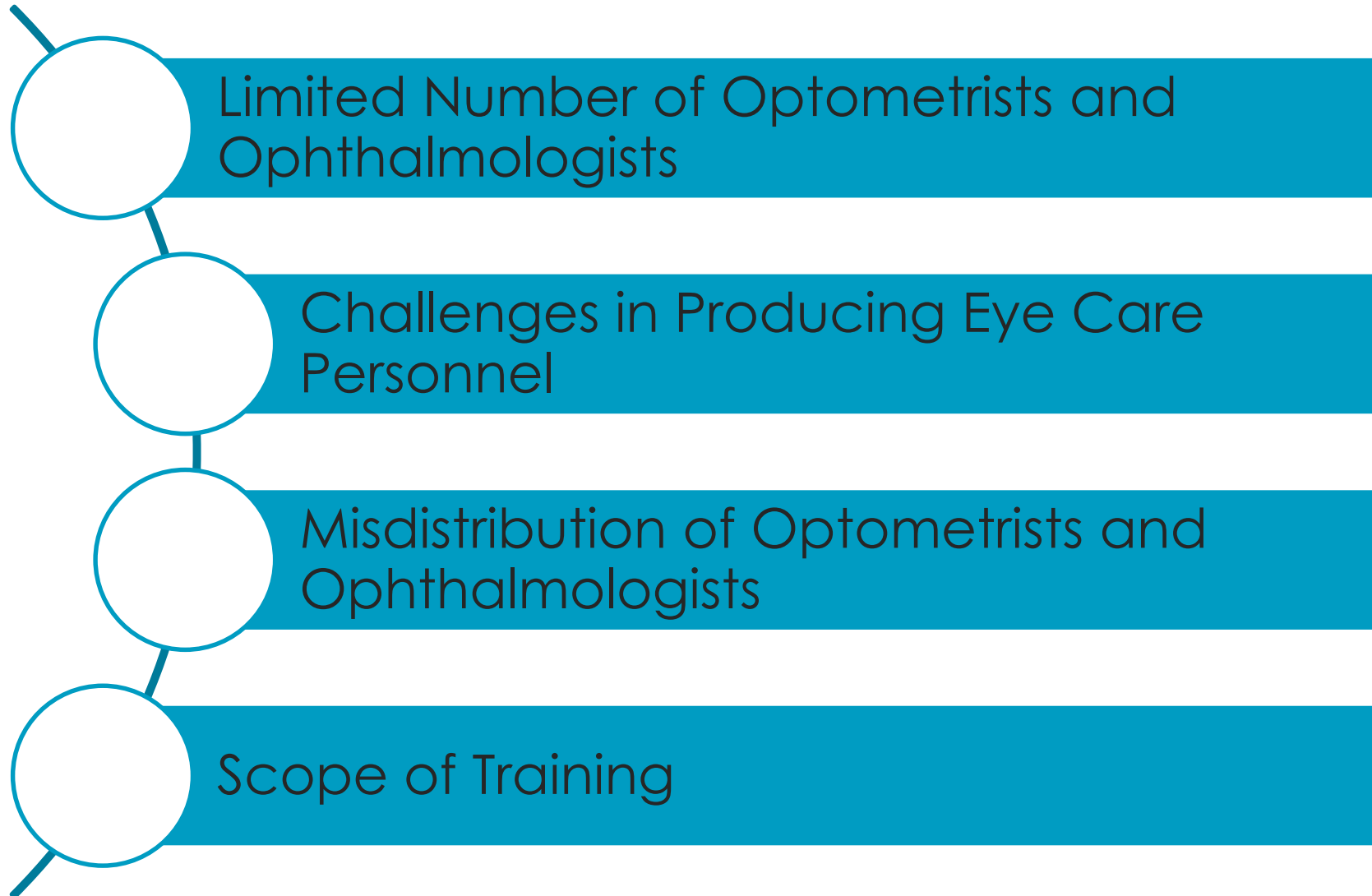
- Under resourced
- Eye care not a priority

## Private Sector

- Under developed
- Concentrated in cities

# Africa: Human Resources Challenges

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# Africa: Pockets of Success

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Good demonstration of ability to contribute

**Lack of Scale – do we consider this SUCCESS?**

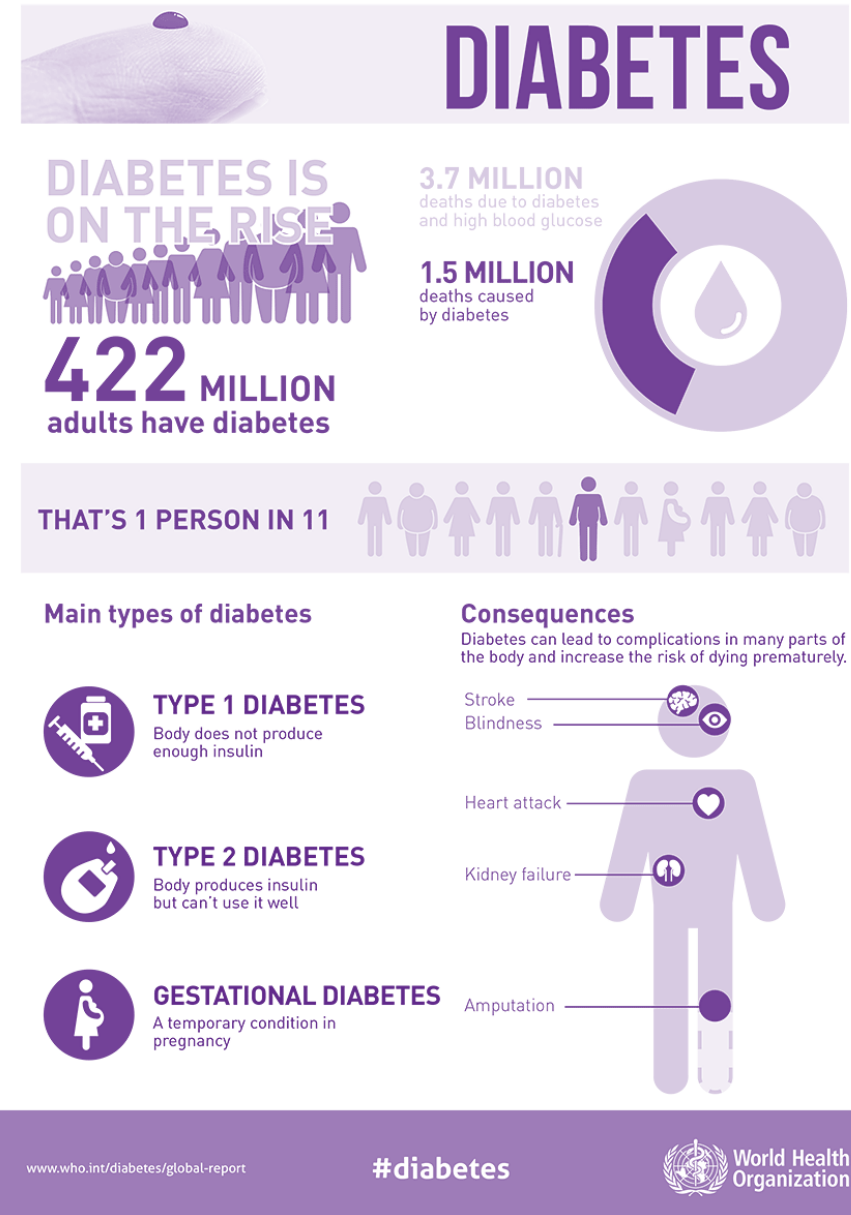
Small but active group driving access in Africa

NGO driven

# Africa: Enabling the Healthcare Environment

Diabetes is among the leading NCDs

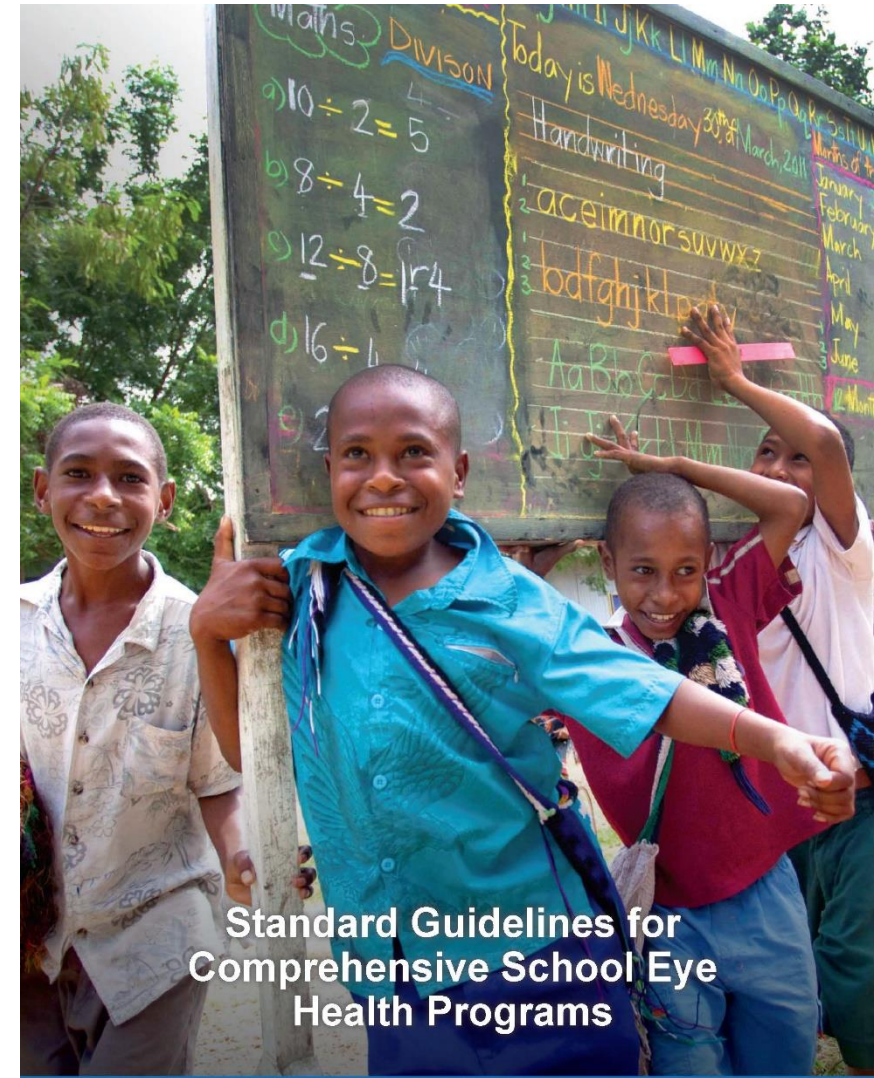
Eye disease as a result of uncontrolled diabetes can be devastating



# Africa: Enabling the Education Environment

Ensure School Eye Health is included in Global Health and Education agendas

Utilize standards appropriately designed by organizations like IAPB and their member partners



# Africa: Internalizing the Reports

Recognition of the optometry profession as more than supplementary health workers

Incorporate into planning and resource allocation

Work to the benefit of the profession and public



## THE ISSUE

**285**

million people are visually impaired

**4/5**

cases are avoidable



**90%**

Of the world's visually impaired people live in developing countries



## WHAT IS THE GLOBAL ACTION PLAN?

A global commitment endorsed by all WHO Member States to **improve eye health for everyone** ('Universal Eye Health') over the next 5 years.

**OUR TARGET** **25%**   
Reduction of avoidable blindness and visual impairment by 2019

## HOW?

### STRONG & EQUITABLE EYE HEALTH SYSTEM



Collect evidence on magnitude and causes



Train more eye doctors, nurses and optometrists



Provide comprehensive eye care services to all




### IMPLEMENTATION OF NATIONAL EYE HEALTH PLANS

## WHAT GOVERNMENTS MUST PUT IN PLACE

**1**   
Comprehensive eye care services for major causes of visual impairment, covering promotion, prevention, rehabilitation and care

**2**   
Access for everyone, including the poor, minorities, indigenous peoples, persons with disabilities, women and those in rural areas

**3**   
Eye health integrated into national health systems

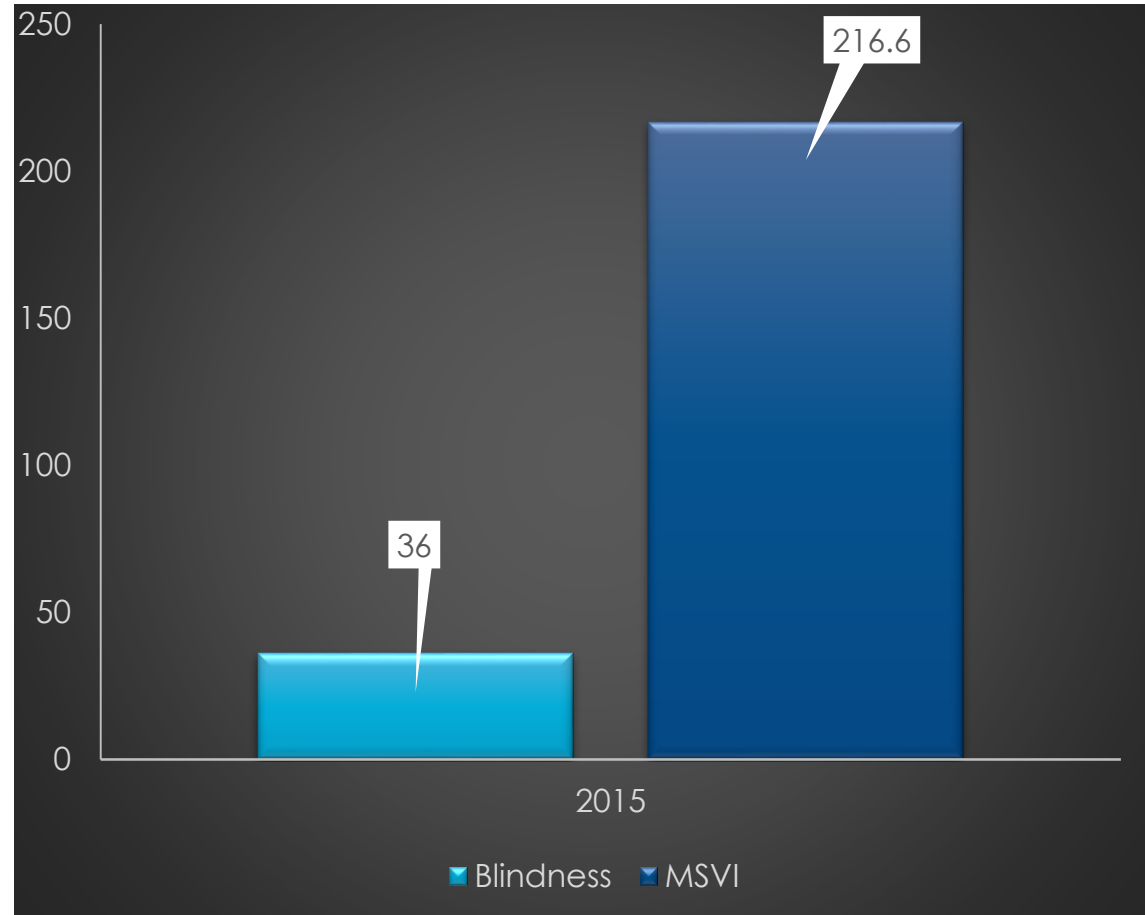
**4**   
Point-of-care payment should not prevent access and should be free for the poorest



# Africa: Leveraging the Data

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URE 2<sup>nd</sup>  
leading  
cause of  
blindness



URE  
leading  
cause  
of  
MSVI

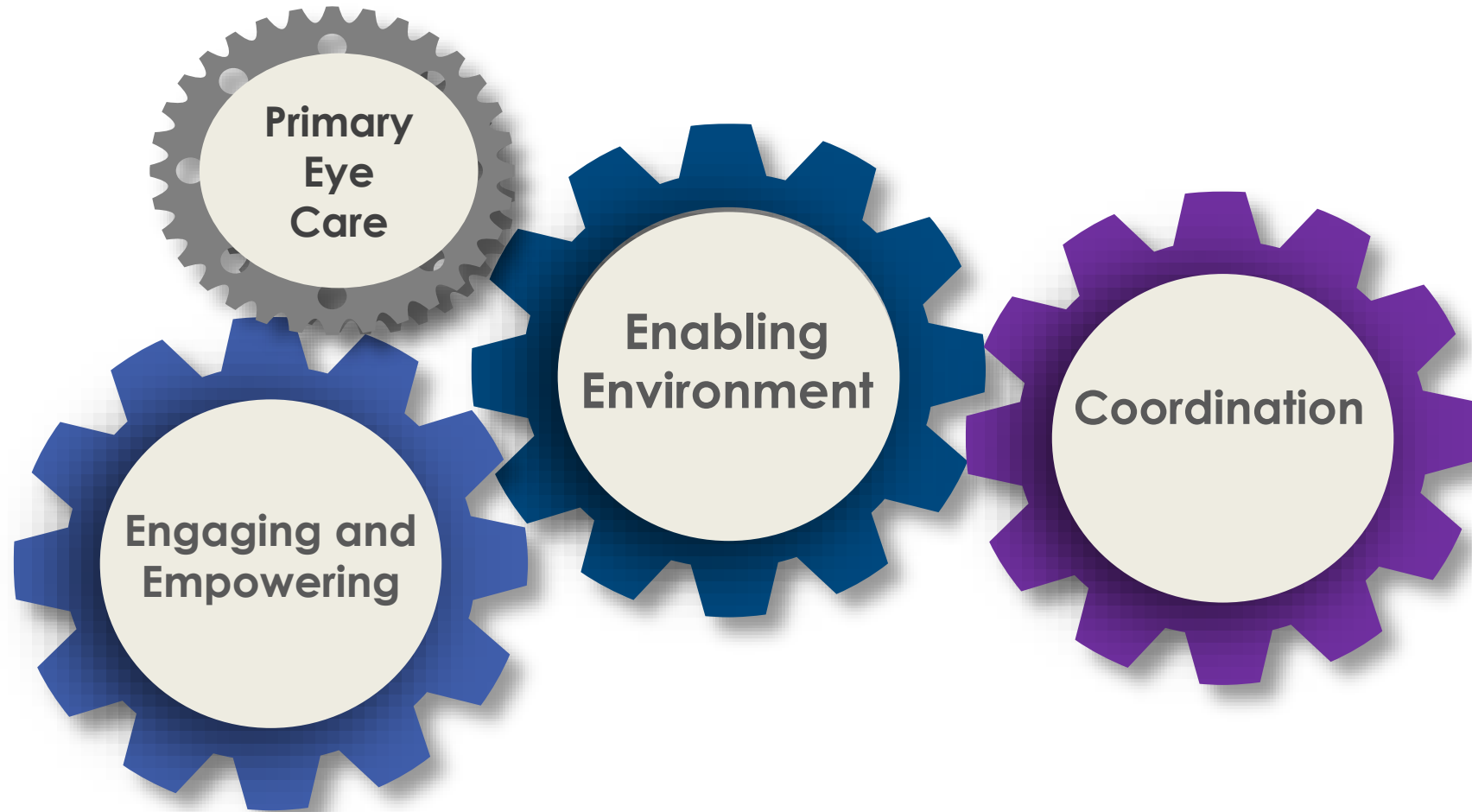
# Africa: Leveraging the Current Trends

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# Africa: Leveraging a Systems Approach to Vision Care

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# Africa: Leveraging the Power of Human Capital

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Human Resource Development



# Leveraging the Creation of Sustainable Access Points

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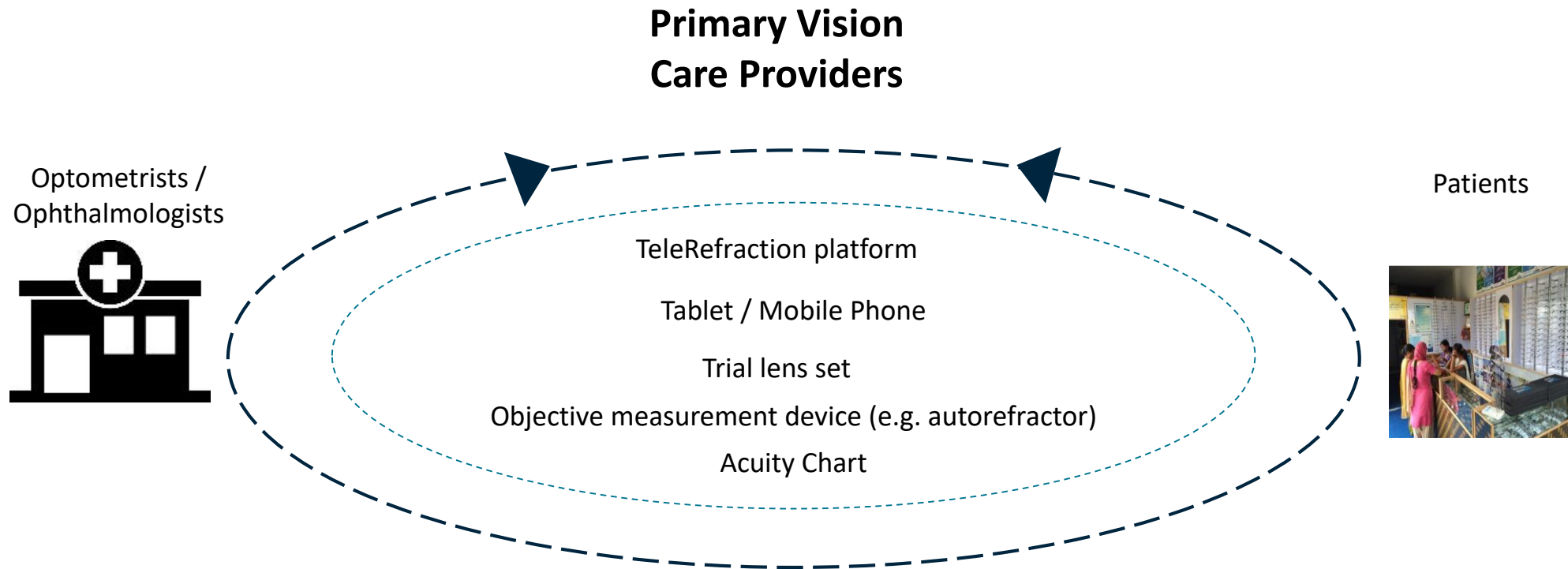
**\$2.4B to create 1 million new sustainable access points which will equip 90 percent of the population in need**



- **600,000** full refraction service points
- **400,000** readers-only points needed

# Leveraging Innovation: Tele-refraction

- ▶ Connects **Primary Vision Care Providers** with qualified **Optometrists/Ophthalmologists** who remotely oversee the refraction process in **real time**



# Benefits of Tele-refraction

- ▶ Provide professional services to patients in remote areas
- ▶ Prescriptions with professional optometrist's validation
- ▶ Digital data – no more manual writing of patient's data
- ▶ Easy tracking of patient information
- ▶ Audio-Video call with an Optometrist for real time guidance

# Leveraging Awareness Building

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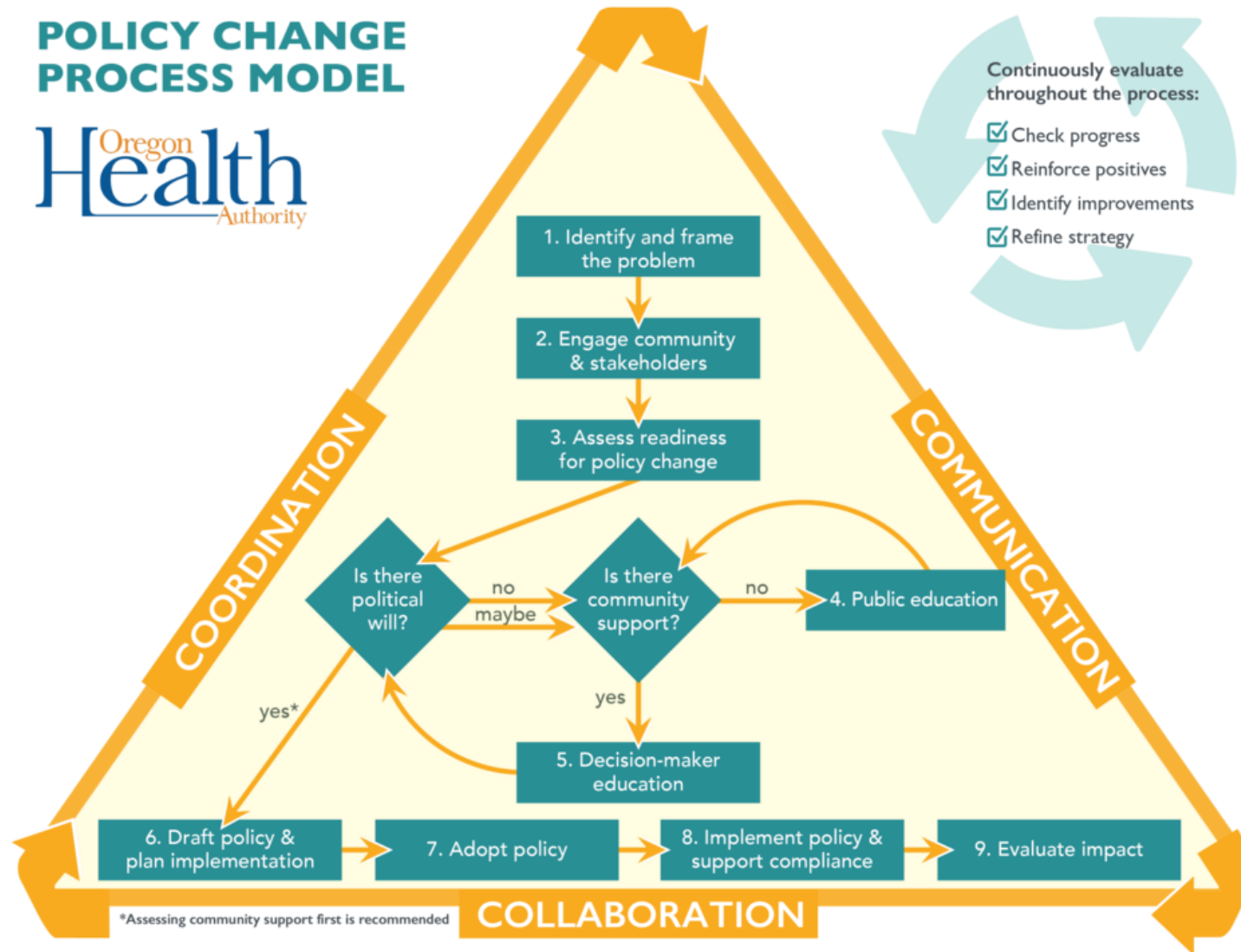
- ▶ Health Promotion
- ▶ Engagement with public /patients
- ▶ Example: SEE NOW campaign in India





# Africa: Leveraging Advocacy

## POLICY CHANGE PROCESS MODEL



# Africa: Leveraging Technology

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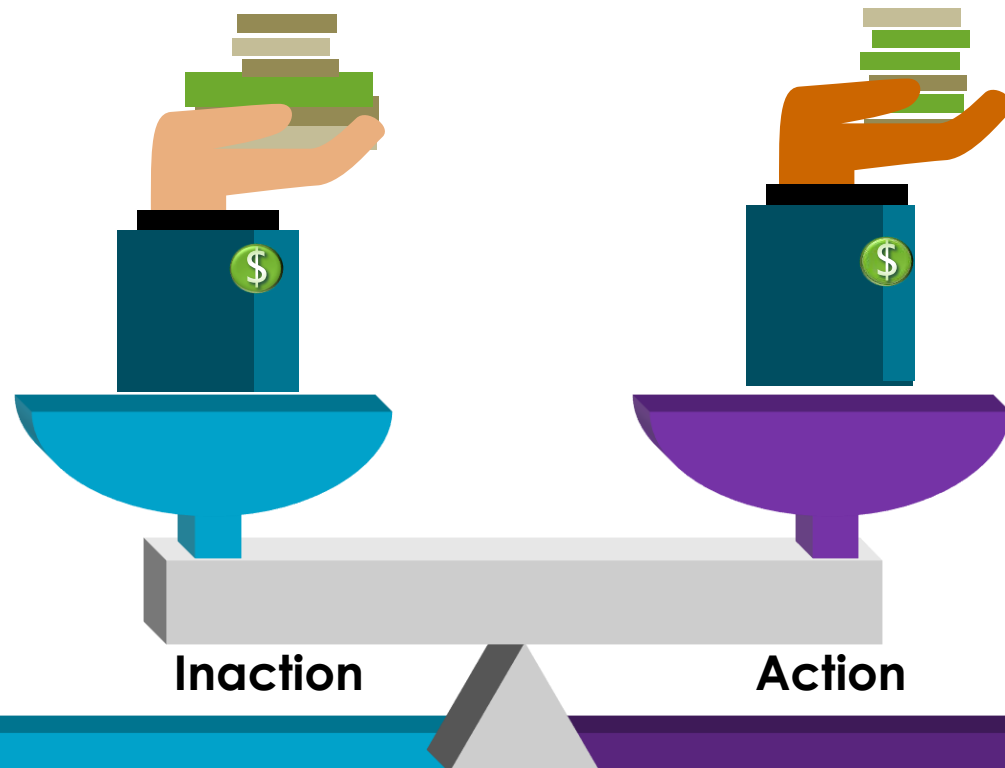
TECHNOLOGY  drives



# Africa: Leveraging the Economic Case

Cost of Inaction vs Savings of Action can be used as an advocacy tool

Myopia \$244 billion in Lost Productivity (Naidoo et al, 2019)

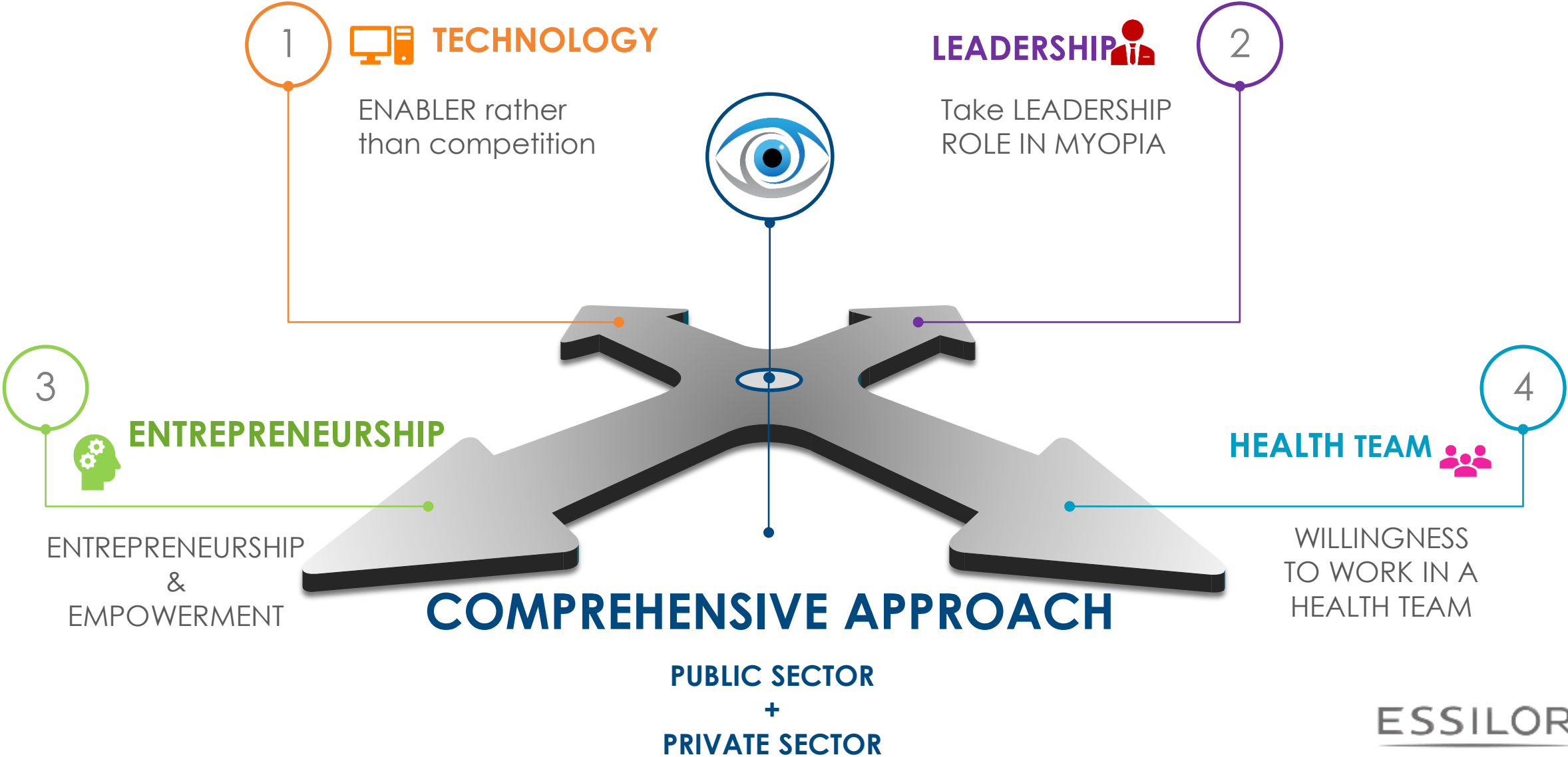


# What Will We See in a Post-COVID-19 World?

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- ▶ Unemployment
- ▶ Reduced disposable income at the household level
- ▶ Health systems under resourced
  
- ▶ WE MUST BE PREPARED TO THINK DIFFERENTLY

# Africa: Optometry's Response





**TOGETHER WE CAN  
ELIMINATE  
POOR VISION  
BY 2050**



# Q&A Session



# THANK YOU



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