



# THE APAC VISION HEALTH SURVEY

KEY FINDINGS

## Vision Health in APAC: An Urgent Challenge

Ageing and diabetes are accelerating vision loss in APAC. Without action, the burden will continue to grow – but better policies, innovation, and awareness can help reverse the trend.

The scale of the challenge is evident in the numbers:



**2.2 billion**

people suffer from vision impairment worldwide<sup>1</sup>



**9th**

most burdensome disease group, ahead of Alzheimer's disease, respiratory disorders, or reproductive disorders<sup>3</sup>



**US\$411 billion**

lost on global productivity every year<sup>2</sup>



**Two-thirds**

of those experiencing moderate-to-severe vision impairment live in Asia Pacific<sup>4</sup>

**Despite the challenge, urgent action can change the trajectory – 90% of vision impairments can be prevented or treated with appropriate care.<sup>5</sup>**

# About the APAC Vision Health Survey

## OBJECTIVE

Conducted by GWI on behalf of Roche, the [APAC Vision Health Survey](#) explored the everyday challenges related to vision impairment and the unmet needs in eye health. More specifically, it sought to understand respondents' perception of vision health, its relationship with ageing and diabetes, and their awareness of retinal diseases and general eye care. The survey findings highlight how vision loss affects individuals across Asia Pacific, contributing to the understanding of its socio-economic impact and the importance of improving vision care access.



## RESPONDENTS

General public aged 40 and over



## TOTAL SAMPLE

4,354



## MARKETS AND SAMPLE SIZES

4,354 individuals aged 40+ across eight APAC markets: Australia [502], Hong Kong [476], Malaysia [607], Philippines [478], Singapore [604], South Korea [510], Taiwan [570], and Thailand [607]



## FIELDWORK DATES

27th August - 2nd September 2024



## METHOD

Online multiple-choice questionnaire with self-reported behaviours and perspectives data in English, Korean, Malay, Tagalog, Thai, and Traditional Chinese

# KEY SURVEY INSIGHTS



## Five Core Themes Emerged Across APAC

- 1 THE HUMAN COST: MULTI-DIMENSIONAL AND FAR-REACHING**

Vision impairment profoundly affects multiple dimensions of life and imposes substantial physical, emotional, and financial burdens on families and caregivers. These individual challenges extend to health systems and society as a whole.
- 2 THE PREVENTION PARADOX: AWARENESS AND ACTION GAP**

Despite growing concerns about vision health, the APAC region faces a significant gap in preventive eye care, leaving millions vulnerable to vision loss.
- 3 DIABETES AND VISION HEALTH: A NEGLECTED CRISIS**

Diabetes, a major risk factor for vision loss, is on the rise in APAC. Despite widespread awareness of its link to vision problems, many still fail to meet eye exam guidelines.
- 4 THE AGEING FACTOR: OPPORTUNITIES AND CHALLENGES**

As the population aged 65+ in APAC is projected to double by 2050, the risk for retinal diseases increases in the region. However, this issue is often perceived as an inevitable part of ageing, leading to a neglect of preventive measures.
- 5 LOW AWARENESS OF RETINAL DISEASES**

Specific retinal conditions impose significant costs on society, yet awareness of these conditions is critically low. Innovative treatments offer promising potential to mitigate this risk.

## Theme 1: The Human Cost - Multi-dimensional and Far-reaching



### **WHY IS THIS CRITICAL?**

**Vision impairment affects not only individuals but also deeply impacts caregivers, the wider community, entire health systems, and societies, resulting in significant human and socioeconomic burdens.<sup>6</sup>**

- Beyond burdening daily life, vision impairment cost global economic productivity US\$411 billion every year.<sup>2</sup>
- Vision impairments are the ninth most burdensome disease group if measured in years lived with disability – ahead of Alzheimer’s, respiratory disorders, or reproductive disorders.<sup>3</sup>
- Asia Pacific accounts for two-thirds of all moderate-to-severe vision impairments worldwide, further threatened by ageing and rising diabetes prevalence.<sup>6</sup>



# Theme 1: The Human Cost – Multi-dimensional and Far-reaching

The survey revealed that:

## PEOPLE WORRY ABOUT THE IMPACT ON THEIR DAILY LIVES

- 9 in 10 respondents are concerned about their current eye health
- 7 in 10 foresee difficulties in performing daily tasks
- 4 in 10 anticipate mental health challenges
- Nearly half expect a decline in quality of life
- More than 1 in 4 worry about their social interactions



# 95%

## OF CAREGIVERS REPORT SIGNIFICANT CHALLENGES

- 38% suffer from emotional distress
- 37% experience exhaustion
- 32% struggle in managing caregiving among other duties



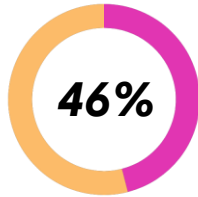
### EXISTING STUDIES DEMONSTRATE THAT:

The broader economic implications of vision impairment span across decreased productivity, absenteeism, job losses, and a range of financial, social, and psychological challenges.<sup>2</sup>

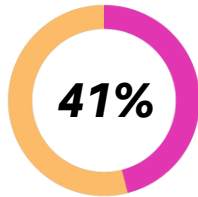
# Theme 1: The Human Cost – Multi-dimensional and Far-reaching

The economic consequences are also widely evidenced

## AMONG GENERAL RESPONDENTS



expect vision loss to limit their ability to maintain employment



consider it would impact their financial health



## AMONG CAREGIVERS

**39%** face financial strains



**25%** report productivity loss



**26%** have seen income reductions



**26%** found it difficult to take time off work





# Theme 1: The Human Cost – Multi-dimensional and Far-reaching

The economic consequences are also widely evidenced

## GENDER NUANCES



Men and women bear distinct burdens in caregiving

- Financial strain is the primary concern for male caregivers (44% male vs. 34% female)
- Exhaustion is the top challenge for female caregivers (39% female vs. 35% male)
- Female respondents are 13% more likely than males to struggle with balancing caregiving and other responsibilities

## MARKET SPECIFICS



People fear different challenges depending on where they live

- Most concerned about finances: Philippines (51%)
- Most concerned about employment: Singapore (52%)
- Most concerned about mobility: Australia (62%)
- Most concerned about reading and using technology: Philippines (54%)
- Most concerned about social isolation: South Korea (36%)

### Among caregivers

- Emotional distress: Highest in Hong Kong at 52%
- Exhaustion: Most prevalent in South Korea at 51%
- Balancing caregiving: Particularly challenging in Malaysia at 44%

## WHAT DOES THIS MEAN?

The high human cost requires immediate attention and action. These multidimensional challenges must be considered holistically when assessing the overall vision health burden and developing effective solutions. **Vision care is not only a health investment, but an economic and societal imperative.**

## Theme 2:

# The Prevention Paradox – High Awareness, Low Action



### WHY IS THIS CRITICAL?

Despite high concern for vision loss, findings indicate that preventive vision care is neglected by many.

- Approximately 90% of vision loss can be treated or prevented through early detection and appropriate treatment.<sup>5</sup>
- Existing studies demonstrate that the barriers behind the low uptake of preventative eye care are multifaceted, encompassing awareness, accessibility, and affordability.<sup>8-10</sup>
- The American Academy of Ophthalmology recommends that individuals from age 40-54 attend regular eye exams at least every two to four years and 55+ attend at least every one to three years.<sup>7</sup>

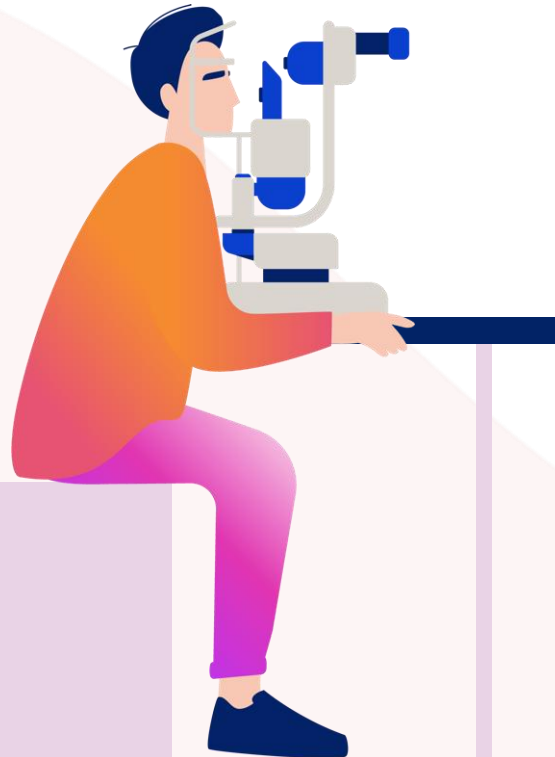


## Theme 2: The Prevention Paradox – High Awareness, Low Action

The survey revealed that:

### EYE HEALTH IS A SIGNIFICANT CONCERN IN APAC

- 9 in 10 express concern about their eye health
- 1 in 5 are extremely concerned about their eye health



### YET THERE IS A LOW RATE OF PREVENTIVE EYE CHECKS

- Only 28% receive an eye check at least once a year
- 32% would only go see an eye care professional when symptoms arise
- 12% never visit an eye care professional

## Theme 2: The Prevention Paradox – High Awareness, Low Action

Dynamic and system-level barriers reported

### WAIT TIME REPORTED

The average wait time reported for an eye care appointment in APAC is:\*

**13.7 days**



#### EXISTING STUDIES DEMONSTRATE THAT:

- Two-thirds of global ophthalmologists are in 13 countries, with only three in Asia Pacific and a particularly severe shortage in Southeast Asia.<sup>11</sup>
- Scheduling difficulties and access to care facilities disproportionately affect rural, female, and low-income patients.<sup>12</sup>
- Developing economies typically prioritise acute symptomatic eye care over preventive strategies.<sup>13</sup>
- Financial support affects quality and availability of eye care delivery.<sup>14</sup>
- Low health literacy and awareness about the importance of eye exams, combined with limited knowledge of eye conditions and treatments, also impede preventative care.<sup>15</sup>

\* Respondents were asked: “How long did you have to wait for the [eye care] appointment?” Options included: within a day, within a week, within a month, within six months, more than six months, and unsure/prefer not to say. Average wait times were calculated using the midpoint method, and actual wait times may differ.

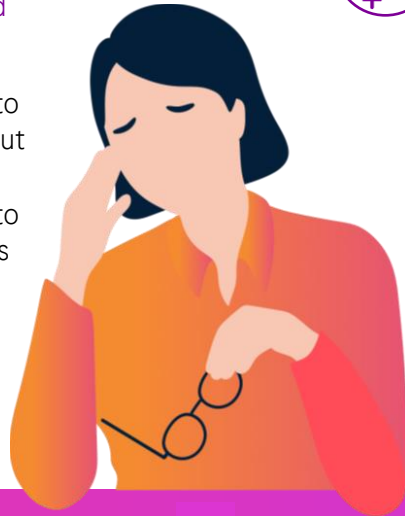
## Theme 2: The Prevention Paradox – High Awareness, Low Action

Preventive care is low across genders and geographies

### GENDER NUANCES

Slight differences in concern and preventive care attendance

- Women are 12% more likely to be extremely concerned about eye health
- Women are 11% more likely to attend regular eye check-ups



### MARKET SPECIFICS

Of the surveyed markets, some stand out when considering concern for vision health and preventive care attendance

- South Koreans are nearly twice as likely as the APAC average to be "extremely concerned" about eye health
- Thailand (18%) leads in respondents who skip regular eye checks
- In Taiwan, 53% of respondents seek eye care only when symptoms appear, the highest in the survey



### WHAT DOES THIS MEAN?

The stark disconnect between prevention potential and reality – where 90% of vision impairment is preventable yet preventive care uptake remains low – presents an opportunity to address the awareness-action gap across APAC.<sup>5</sup> Understanding where unmet needs exist may help inform collaborative approaches to enhance preventive vision care.

## Theme 3: Diabetes and Vision Health – A Neglected Crisis



### WHY IS THIS CRITICAL?

Vision impairment is a pervasive challenge for people living with diabetes and societies in APAC.

- The risk of blindness is 25 times higher in people with diabetes.<sup>16-18</sup>
- Asian people are at a higher risk of developing diabetes. In 2021, there are 296 million people living with diabetes in WHO Western Pacific and Southeast Asia regions.<sup>19</sup>
- Over three-quarters of adults with diabetes reside in low- and middle-income countries.<sup>19</sup>
- Additionally, with diabetes being the underlying causal factor, diabetic macular edema (DME) is a major cause of vision loss among the working-age population, especially in developed countries.<sup>20</sup>
- An annual eye exam is one of the best ways to prevent vision loss and blindness for individuals with diabetes.<sup>21</sup>



## Theme 3: Diabetes and Vision Health – A Neglected Crisis

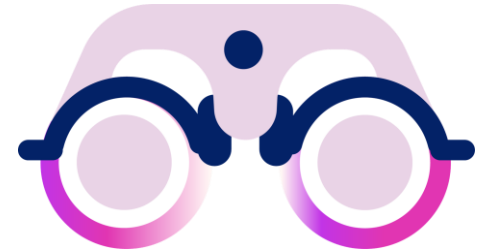
The survey revealed that:

### PEOPLE LIVING WITH DIABETES ARE STRUGGLING WITH VISION IMPAIRMENT

- Nearly two-thirds of individuals living with diabetes report experiencing vision symptoms
- Over a third say vision impairment has a moderate-to-severe impact on their daily lives
- 9 in 10 respondents living with diabetes are aware that the metabolic condition is a risk factor for vision impairment

### HOWEVER, THERE IS A BEHAVIOURAL GAP IN TAKING PREVENTATIVE EYE CARE

- Nearly one-third do not adhere to the annual eye exam guideline
- 1 in 10 of people with diabetes never undergo eye exams

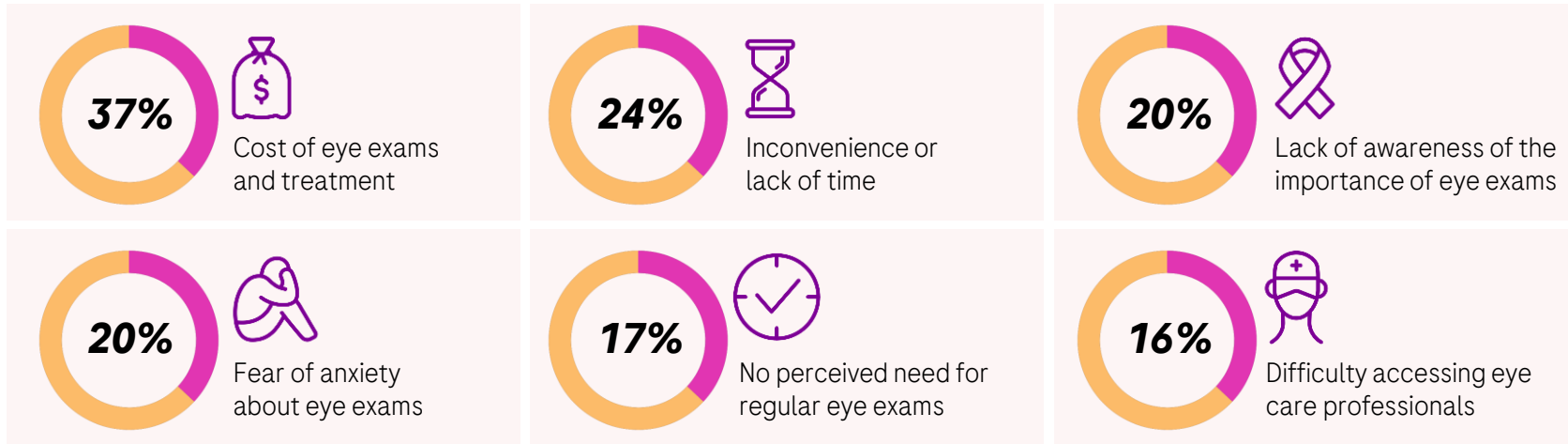



#### EXISTING STUDIES DEMONSTRATE THAT:

Diabetes increases the risk of developing serious eye conditions, including diabetic retinopathy, which is a leading cause of blindness among working-age adults.<sup>22</sup>

## Theme 3: Diabetes and Vision Health – A Neglected Crisis

### A WIDE RANGE OF BARRIERS PERSIST SPANNING FINANCIAL, ACCESS, EMOTIONAL, AND AWARENESS FACTORS\*



Of note, the average wait time to see an eye care professional for a person living with diabetes in APAC is **16.2 days** 

\* Percentage of respondents with diabetes who identified each option as a barrier to preventive care.



## Theme 3: Diabetes and Vision Health – A Neglected Crisis

Various demographics face a distinct challenge

### GENDER NUANCES



Women living with diabetes and vision impairment experience greater struggles

- Female respondents with diabetes are 3x more likely than males to report severe impact from diabetes-related vision impairment (6% vs. 2%)
- Women face greater barriers compared to men concerning the cost of eye exams/treatment, difficulty accessing eye care professionals, and fear or anxiety about eye exams

### MARKET SPECIFICS



Location matters – impact and barriers vary by market

- Diabetes-related vision loss most significantly impacts respondents from the Philippines and Hong Kong, with 89% and 81% respectively reporting daily challenges
- The lack of awareness about the importance of eye exams is higher in Malaysia, South Korea, and Thailand
- Fewer respondents living with diabetes in Hong Kong, Malaysia, and the Philippines perceive a need for regular eye exams

### WHAT DOES THIS MEAN?

These findings highlight opportunities to integrate vision care into diabetes management programmes, enhance awareness of preventive eye exams among at-risk populations, and develop approaches that address the specific barriers faced by different communities.

## Theme 4:

# Ageing and Vision Health – Vision Loss Seen as Inevitable



### WHY IS THIS CRITICAL?

Risk of vision loss increases with age, and APAC's population is rapidly ageing.

- Asia-Pacific is ageing more rapidly than in many parts of the world.<sup>4</sup> By 2050, it is predicted that one quarter of APAC will be 60+ years old and one fifth of all people will be 80+ years old.<sup>23</sup>
- 200 million people worldwide are estimated to have age-related macular degeneration (AMD), and by 2040, this number is projected to rise to close to 300 million.<sup>24</sup>
- Vision impairment can contribute to social isolation, difficulty walking, a higher risk of falls and fractures, and a greater likelihood of early entry into nursing or care homes.<sup>25</sup>
- For older adults, consistent eye care, like regular eye exams, is vital to mitigate their risk of vision loss.<sup>1,15</sup>



## Theme 4: Ageing and Vision Health – Vision Loss Seen as Inevitable

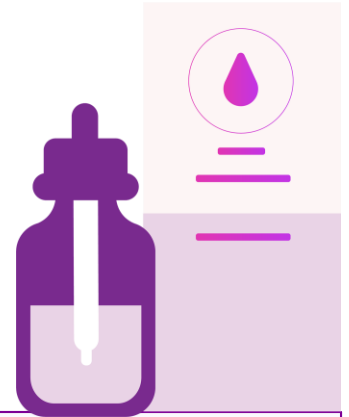
The survey revealed that:

### HIGH AWARENESS OF AGEING AS A RISK FACTOR BUT KNOWLEDGE AND CONCERN ARE LACKING

- 72% recognise ageing as a key risk factor of vision loss
- However, 94% view vision impairment as an inevitable part of ageing
- Nearly a quarter of respondents aged 60+ had no familiarity with AMD
- Individuals in their 70s are approximately one-third more likely than those aged 40-49 to be "not concerned at all" about their eye health

### THIS AT-RISK GROUP IS NOT TAKING NECESSARY PREVENTIVE CARE

- Less than 3 in 5 adults aged 60+ attend regular eye check-ups
- Around 3 in 10 adults aged 60+ only see a vision specialist when symptoms arise



### EXISTING STUDIES DEMONSTRATE THAT:

- Many eye diseases that develop with age are impossible for individuals to detect on their own without proper vision screening, such as a dilated eye exam.<sup>26</sup>
- As people get older, those who suffer from vision loss face an increasing overall burden from it.<sup>27</sup>

## Theme 4: Ageing and Vision Health – Vision Loss Seen as Inevitable

Acceptance of vision loss is more prevalent in some groups

### GENDER NUANCES



Women more accepting of vision impairment than men as a consequence of age in some markets

- Gender nuance in specific markets: In Australia, Singapore, and Malaysia, female respondents were more likely than males to believe that vision impairment is inevitable and cannot be managed
  - Australia: 14% female vs. 9% male
  - Singapore: 10% female vs 9% male
  - Malaysia: 13% female vs. 9% male

### MARKET SPECIFICS



Acceptance of vision loss is high across markets

- Thailand had the highest percentage of respondents (13%) who believe age-related vision loss is inevitable, and nothing can be done to manage it
- This sentiment is particularly pronounced as Thai respondents grow older, with 32% respondents aged 70+ believing vision impairment to be inevitable and unmanageable
- The Philippines has the highest percentage of respondents who believe that vision impairment is not an inevitable part of ageing. However, even there, only 7% hold this belief

### WHAT DOES THIS MEAN?

These findings highlight the need to integrate vision care into healthy aging policies. Raising awareness of preventive exams, improving education, and embedding eye care into geriatric health services can address barriers like low awareness and delayed diagnosis, supporting independence in aging populations.

## Theme 5: Low Awareness of Retinal Disease – A Knowledge Gap



### WHY IS THIS CRITICAL?

APAC has low awareness of retinal diseases, meaning individuals cannot understand their symptoms or severity, which has a substantial impact on societies.<sup>22,28</sup>

**A study\* across 10 major economies from 2017 to 2023 found that DME and AMD accounted for 8 million disability-adjusted life years (DALYs) lost and a US\$356 billion productivity loss. Projections for 2024 to 2034 indicate 13 million lost healthy life years and US\$715 billion in productivity losses in the same economies.<sup>29</sup>**

*\* Note: The data in this study is a globally representative sample of 10 countries, including: Brazil, Canada, China, France, Germany, Italy, Japan, Spain, the United Kingdom, and the United States.*



## Theme 5: Low Awareness of Retinal Disease – A Knowledge Gap

The survey revealed that:

### THERE IS LIMITED AWARENESS OF SPECIFIC RETINAL DISEASES IN APAC

#### Diabetic Macular Edema (DME):

- Average APAC awareness score: 1.9 out of 4
- 4 in 10 individuals are not at all familiar with DME

#### Age-Related Macular Degeneration (AMD):

- Average APAC awareness score: 2.1 out of 4
- Over a quarter of respondents are not at all familiar with AMD

#### Wet-AMD:

- Average APAC awareness score: 1.7 out of 4
- Over half of respondents are not at all familiar with wet-AMD

#### Retinal Vein Occlusion (RVO):

- Average APAC awareness score: 1.6 out of 4
- Almost 6 in 10 individuals are not at all familiar with RVO

On a scale of 0-4, average awareness across surveyed retinal diseases was just 2.2, meaning most respondents may have heard of them but know nothing about them.

### MARKET SPECIFICS

Markets with the lowest level of retinal disease awareness (by percentage of respondents who have never heard of these conditions):



- **DME:** Singapore (58%)
- **AMD:** Malaysia (52%)
- **Wet-AMD:** Malaysia (66%)
- **RVO:** Australia (74%)



### EXISTING STUDIES DEMONSTRATE THAT:

A lack of knowledge of retinal disease and their symptoms can contribute to patients living without a diagnosis, in some cases allowing the diseases to progress. This delay in diagnosis can lead to poor health outcomes increasing the burden on health systems and society.<sup>22</sup>

## Theme 5: Low Awareness of Retinal Disease – A Knowledge Gap

Novel therapies offer hope to patients and health systems

### INNOVATIVE TREATMENTS CAN REDUCE THE BURDEN OF RETINAL DISEASE

The WifOR study\* on 10 major economies from 2017-2023 shows the transformative value of innovative AMD and DME treatments. These innovative treatments contributed:<sup>29</sup>

- A cumulative 1,500 quality-adjusted life years (QALY)
- US\$173 million to economic growth

The same study found that in 2023 alone, treatment of those aged 60+ generated:

- US\$39 million in economic value
- As projected treatment access increases, in those 10 economies from 2024-2032, these treatments are expected to contribute:
  - 64,000 QALYs
  - US\$6.3 billion more



*\*Note: This study was commissioned by Roche. The data in this study is a globally representative sample of 10 countries, including: Brazil, Canada, China, France, Germany, Italy, Japan, Spain, the United Kingdom, and the United States.*

### WHAT DOES THIS MEAN?

Despite widespread awareness of vision risks like ageing and diabetes, knowledge of specific retinal diseases remains critically low across APAC. The human and economic burden of these conditions is substantial and demands urgent action. Advancing innovative treatments, strengthening disease management, and expanding education are essential to preserving vision and reducing long-term societal costs.

CALL TO  
ACTION





# Call to Action

The rapidly ageing population and rising diabetes rates are placing unprecedented pressure on vision health in the APAC region. Global health institutions emphasise that addressing preventable vision loss requires coordinated efforts from all healthcare systems. Drawing on recommendations from leading organisations such as the WHO, here are six key actions to strengthen eye care throughout the region.

## **1. ESTABLISH A COMPREHENSIVE NATIONAL VISION PLAN**

Integrate eye care into national health strategies and policies, emphasising preventive services.

## **2. IMPROVE AWARENESS OF VISION CARE AND EYE DISEASE**

Increase public health campaigns and improve access to vision care resources to empower all individuals, especially those at high risk, to actively pursue preventive and timely eye care.

## **3. INTEGRATE VISION CARE INTO THE HEALTHCARE OF AT-RISK GROUPS**

Incorporate vision care into health service delivery at all levels, such as diabetes and ageing care, to enhance system efficiency and support higher-risk and underserved communities.

## **4. IMPROVE THE VISION CARE WORKFORCE**

Invest in training and capacity building to develop a skilled and well-distributed eye care workforce.

## **5. EMBRACE DIGITAL HEALTH SOLUTIONS**

Utilise the power of digital solutions, such as telehealth and AI-assisted screening, to address geographical barriers and bridge care gaps.

## **6. EXPAND AND ENSURE INVESTMENT TO VISION CARE**

Recognise the long-term health and economic value of vision care interventions that reduce treatment burdens and enhance patient outcomes.

# THANK YOU

To find out more about Roche or the APAC Vision Health Survey,  
please visit: [go.roche.com/apacvisionhealthsurvey](https://go.roche.com/apacvisionhealthsurvey)



Doing now what patients need next

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# Appendix: About the Survey

The APAC Vision Health Survey explores unmet needs in eye health and the impact of vision impairment across the region. It targeted individuals aged 40+ to understand their perceptions of vision health, its relationship with ageing and diabetes, and their awareness of retinal diseases and general eye care.

Conducted by GWI on behalf of Roche, the online survey gathered responses from 4,354 adults aged 40 and above across eight APAC markets: Australia (502), Hong Kong (476), Malaysia (607), Philippines (478), Singapore (604), South Korea (510), Taiwan (570), and Thailand (607). It ran between 27 August and 2 September 2024 and was available in English, Korean, Malay, Tagalog, Thai, and Traditional Chinese.

The questionnaire used multiple-choice questions to capture self-reported perceptions and behaviours related to vision health and healthcare. As with all survey-based research, responses may reflect common biases such as recall bias or social desirability bias. Overall sample sizes per market are statistically sufficient, though caution is advised when interpreting smaller sub-groups. While this report presents regional trends based on aggregated APAC data, market-level variation exists and findings should be interpreted with consideration of local health system contexts. Additionally, in calculating certain averages, a midpoint estimation method was applied for some questions. Although this provides a reasonable approximation, it may not fully reflect the distribution of responses in all cases.

The findings offer meaningful directional insights into public attitudes and behaviours around vision health in APAC and are intended to complement existing evidence. The survey also lays the groundwork for future research into the economic value of innovation, the cost-effectiveness of care models, and the role of digital health in expanding access to eye care.