



**Eye-conic
Approaches
to Eye Health**

SESSION 4



**Prevent
Blindness**

Focus on Eye Health
National Summit

Engaging Technology to Support Vision Health and Quality of Life



Ranya Habash, MD

CEO, LifeLong Vision
FDA Digital Health Network of Experts
Fmr Medical Director, Technology Innovation
Bascom Palmer Eye Institute
Visionary Innovation Mentor,
Stanford University



Dr. Kyle Keane

Research Scientist,
Massachusetts Institute of Technology
Executive Director, With Participation
Incorporated



Eye-conic Approaches to Eye Health

Engaging Technology to Support Vision Health & Quality of Life

Ranya Habash, MD

CEO, LifeLong Vision

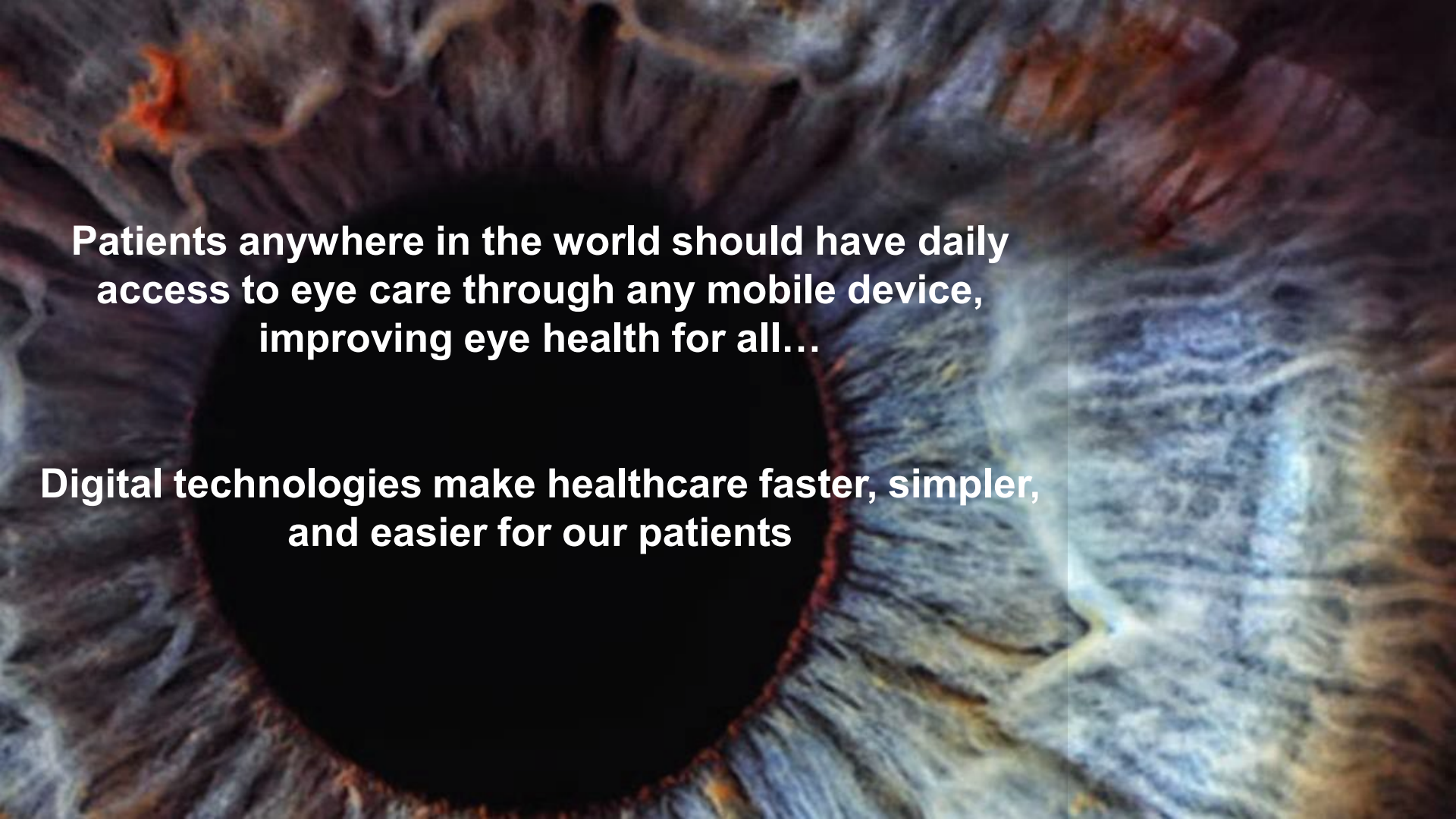
FDA Digital Health Network of Experts

Medical Director, Technology Innovation

Bascom Palmer Eye Institute

Visionary Innovation Mentor,

Stanford University

A close-up photograph of a human eye, showing the iris and pupil. The image is slightly blurred, focusing on the texture of the eye. A large, dark, circular shape is overlaid on the left side of the eye, partially obscuring the pupil and iris. The text is overlaid on this dark area.

**Patients anywhere in the world should have daily
access to eye care through any mobile device,
improving eye health for all...**

**Digital technologies make healthcare faster, simpler,
and easier for our patients**

**Globally, 2.2bn people are
visually impaired. Half could have
been saved**





Patients as consumers.

**We must adapt to the
growing demands of the
global eye care
market**

The Economic Burden of Visual Impairment is Clear

\$410bn


globally, per year

\$139bn

in the US, per year



*World Health Organization, 2020

A vibrant, crowded city street scene, likely Times Square in New York City. The street is filled with a diverse group of people walking in various directions. In the background, tall buildings are covered in large, colorful billboards and advertisements. Visible signs include 'VERSACE', 'Spotify', 'LEVI'S', 'NEW YORK', 'COFFEE + SWEET GURRY', 'MAKE', and 'TENTIA'. The overall atmosphere is one of a bustling, modern urban environment.

**Often, the same simple
solution helps people from
both extremes**

Our daily lives have already shifted to digital

Digital interaction is taking a greater role in the most intimate aspects of our daily lives



Gaming...



Working...



Learning...



Shopping...



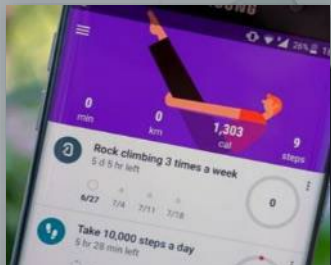
Banking...



Dating...

Healthcare has become the latest aspect of our lives to welcome innovation

Digital health has enabled a shift from 'patient' to 'consumer' behavior



Vision is one of the last remaining frontiers for digital health

We will move eye care from 'have-to' to 'want-to' by empowering patients through technology



Patients as consumers,
with clear aims and
preferences



Effective in-home
solutions and direct to
patient platforms



Earlier interventions and
better quality of life
outcomes

**Accessible,
intuitive eye care
will impact
every stage of
our lives**



Poor vision means that **30%** of kids suffer a significant impact on long-term health, school performance and social development

Decreased productivity through refractive error and presbyopia

The **leading cause** of hip fractures, car accidents, and cognitive decline is cataracts

A close-up photograph of a young woman with long brown hair, wearing a light blue top, kissing an elderly woman with white hair on the cheek. The elderly woman has her eyes closed and a gentle smile. The background is a plain, light-colored wall.

Every condition
affects more than
just the patient

Impacting quality of life

The most common causes of blindness around the world are treatable or preventable

Normal Vision



Macular Degeneration

Normal Vision



Cataracts

Normal Vision



Glaucoma



Vision. More
than meets
the eye

Vision unlocks other healthcare solutions

By analyzing the eye, we can diagnose early signs of many other diseases...

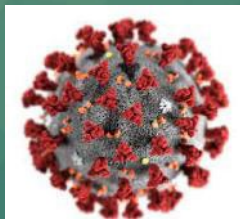
Autism



Alzheimer's



Covid



Heart Disease



Oxygen Levels



Diabetes



Stroke



Traumatic Brain Injury



Migraine



Dementia





Technology Solutions

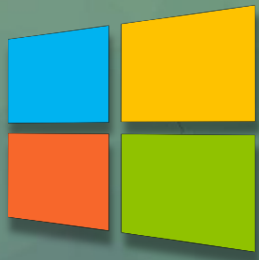
Digital health for eye care enables patients, clinicians, big tech, industry, & insurers can interact seamlessly with one another

Focus on cutting-edge digital tools for telehealth, IoT, data analytics, remote patient monitoring, education, patient engagement, and decentralized clinical trials

While generating aggregate data insights in the process

Every device can improve the long-term health of its user

Creating global impact through billions of devices, that cannot be achieved through existing eye care processes



By giving our partners the tools they need to be successful,
their customers become successful.

When our partners and patients win, we all win.

Everyone wins...



Eye care



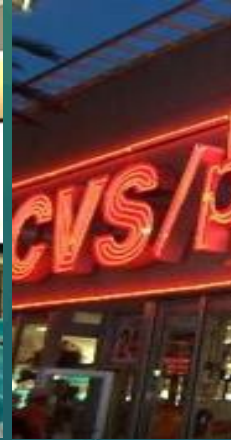
Pharma



Tech



Industry



Retail



Payers



Employers

A close-up, slightly blurred photograph of a person's hands holding a smartphone. The person is wearing a light-colored, possibly white, garment. The background is out of focus, showing what appears to be a person with long, dark hair. The overall lighting is soft and warm. Overlaid on the image is large, white, sans-serif text.

Reaching patients
before they know
they're patients



THANK YOU
