



Microsoft

When Technology empowers Healthy Longevity

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Healthy Longevity

- *Longevity is an age-old quest*
- *Physical Longevity is pegged somewhere between 125-150 years old for humans (given current assumptions)*
- *We are already racing towards our theoretical maximum*

So, what is the real opportunity?

And how can Microsoft uniquely contribute?

It is all about Empowering
Quality of Life



better experiences,

better insights,

and better care

Empowering every person
to achieve a more healthy, productive and happy
life given the years we do have at any given point

Empowering every clinician
with cloud and AI tools to support healthy
longevity while facing a critical gap between
demand and supply

Empowering every researcher
to accelerate discoveries and deliver on the
promise of precision health

AI enabled tools that speak the language of healthcare



Conversational AI for **medical triage**



Cloud-scale machine learning to
translate **T-cells to antigens**



Decision forests for automatic semantic
segmentation of medical images—
anatomy and pathology



Predictive models of **vision
impairment** and eye disease



Cognitive speech services for
medical documentation

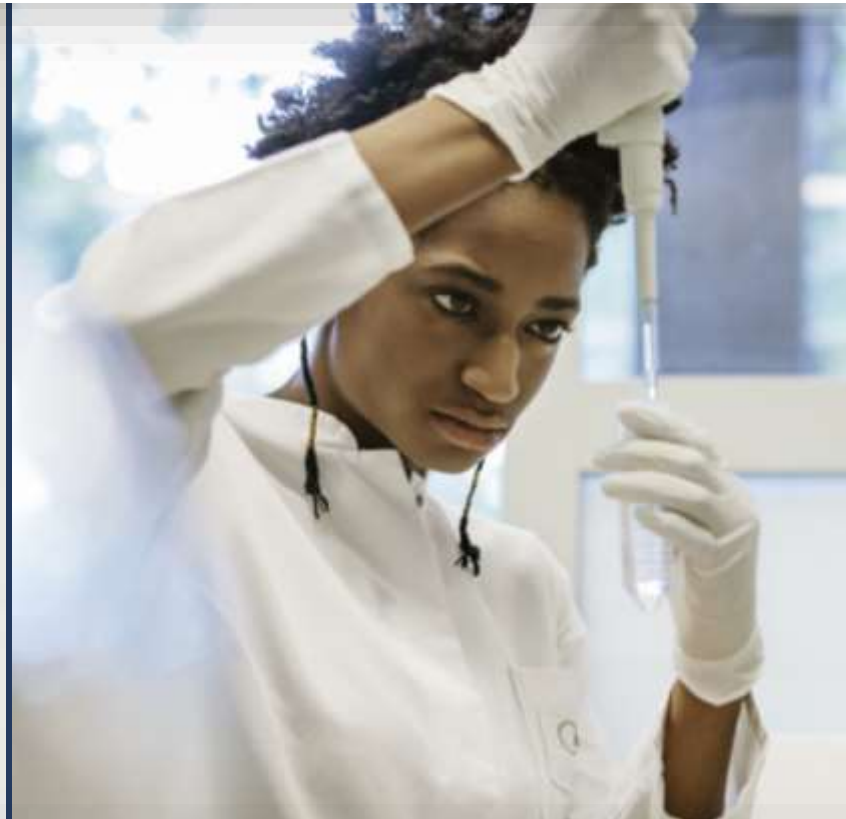


Machine reading of clinical
documentation for **trials matching**

Empowering Healthier Longevity



Digital-First
Health Delivery



Precision Health & AI



Health Access & Equity

Ambient Clinical Intelligence helps clinicians to **re-imagine the medical encounter**, to liberate productivity, improve quality and enhance patient satisfaction

The collage illustrates the Ambient Clinical Intelligence system. The top left image shows a doctor in a white coat interacting with a large screen displaying patient information, including a name 'Alex Porter' and a 'Medications' section. The bottom left image shows a doctor at a desk with a chat interface overlay, displaying a conversation between a doctor and a patient. The right side of the collage features the Nuance and Microsoft logos, a photo of a doctor and a patient, and a detailed diagram of the AI workflow.

The diagram illustrates the workflow of the Ambient Clinical Intelligence system:

- Patient** (represented by a blue box with a waveform icon) interacts with the **Provider** (represented by a grey box with a waveform icon) via a **Microsoft Teams** interface (represented by a purple icon).
- The interaction is processed by the **AI** (represented by a dark blue box with a neural network icon).
- The AI generates two types of notes:
 - Summary Note:** "...The pain is just in the small of my back. It's also very stiff and it hurts to bend over..."
 - Detailed Note:** "...The muscles on either side of your lower spine are in spasm. The spine itself is non-tender. And your reflexes and sensation are normal..."
- The workflow continues through three steps:
 - Creates draft note** (represented by a blue document icon).
 - Quality review and AI Feedback Loop** (represented by a blue checkmark icon).
 - Provider signs in EHR** (represented by a blue checkmark icon).

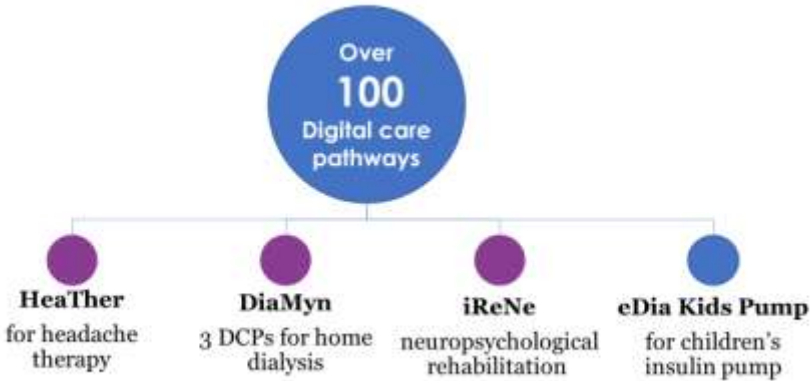
76% believe it improved the patient experience
9 min decrease in average waiting time in primary care
24% increase in number of patients seen per day in

Delivering digital health in the living-room - enabling Continuous Patient Monitoring capabilities to extend patient care beyond the hospital walls—reducing re-admissions and supporting patients from the comfort of their home.



Microsoft Cloud for Healthcare
Continuous Patient Monitoring

Over 100 digital care pathways (DCP) ON THE



Reimaging Senior Care



Equitable & Accessible care



Empower care teams



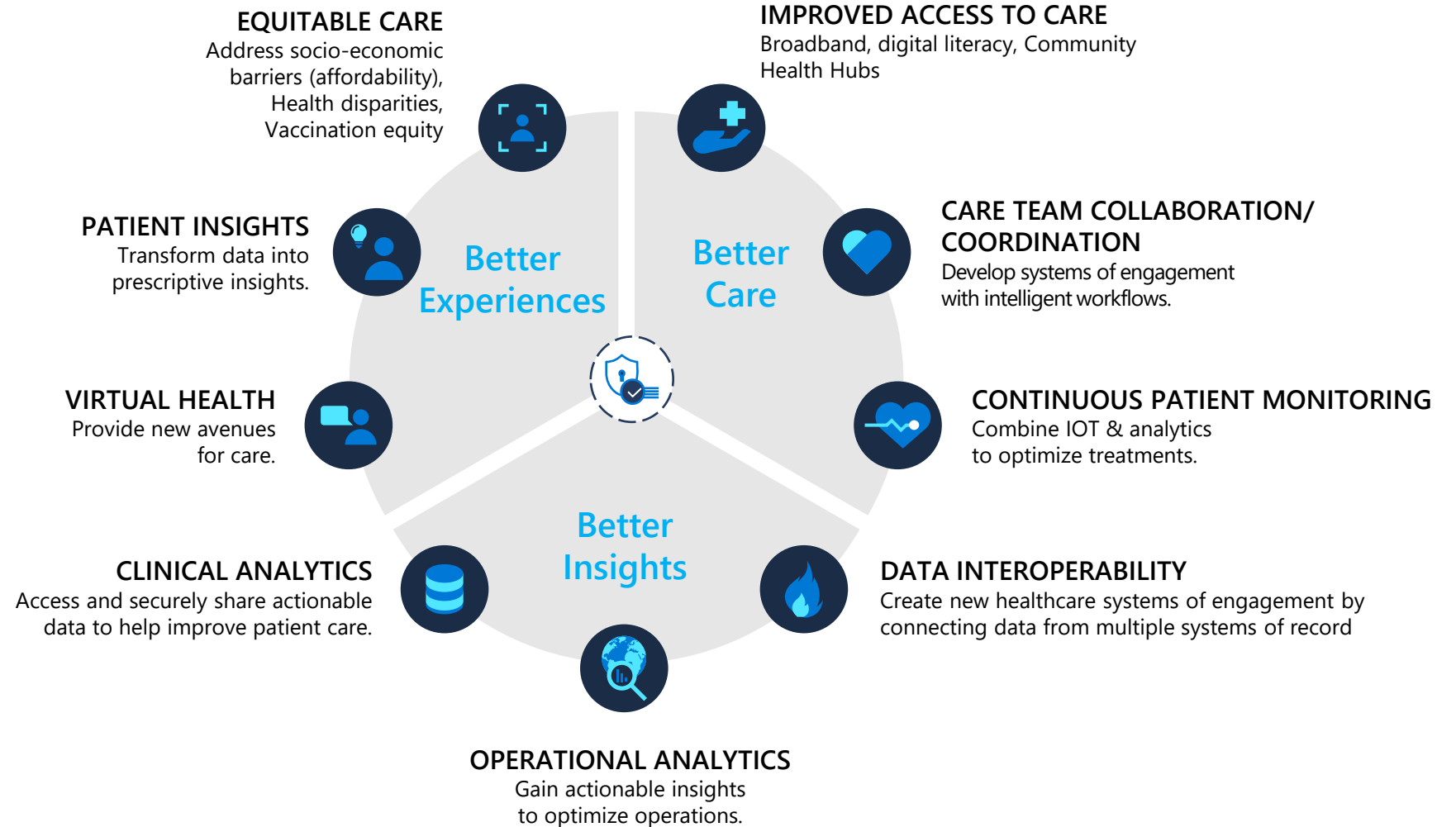
Improve operational outcomes



Protect health information



Reimagine healthcare



Virtual Reality enables Holomedicine - democratizing access to health expertise, transforming teaching and training, enhances safety and collaboration, as well as surgery preparation.

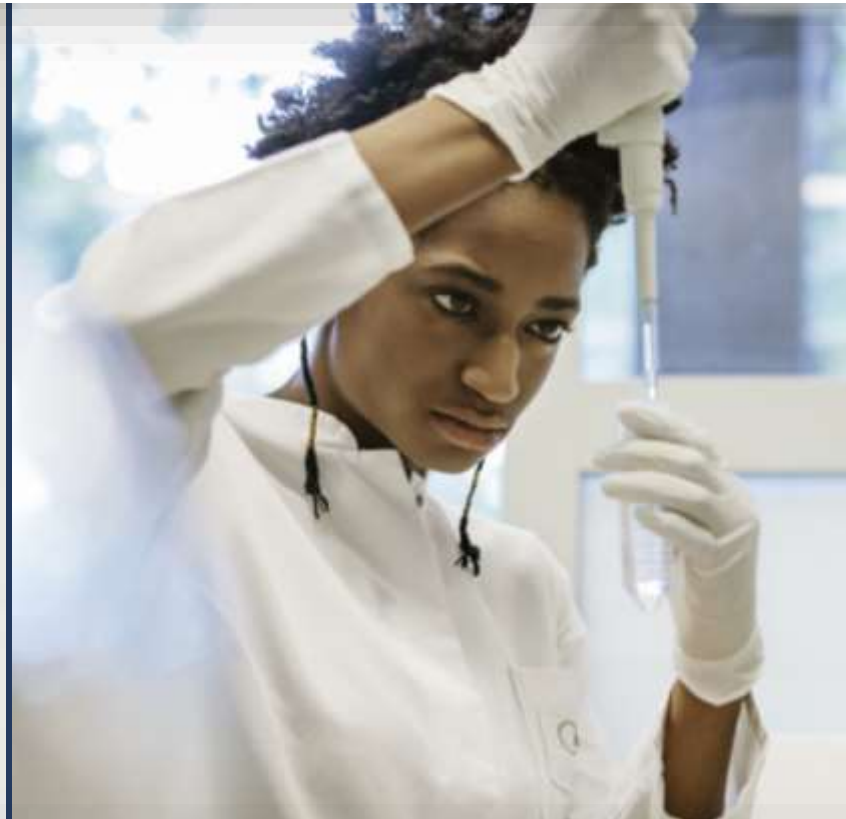


“ We had a French perspective, we had an American perspective and we had a Latin American perspective. We had one-quarter of the world inside the operating room. ”

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Virtual Tumor Board



A partnership to decode the human adaptive immune system to improve the diagnosis of disease



This announcement comes at a time of inflection in healthcare and biotechnology. [We now have the technology to be able to do what we've been talking about for the past decade](#) – develop a universal TCR antigen map that presents an opportunity to help patients at an unprecedented scale

-- **Chad Robins, President, CEO and Co-founder of Adaptive Biotechnologies**

We are very excited and inspired by our collaboration with Adaptive Biotechnologies, as it clearly advances [our mission to use cloud and AI technologies to transform healthcare and improve the lives of people around the world](#).

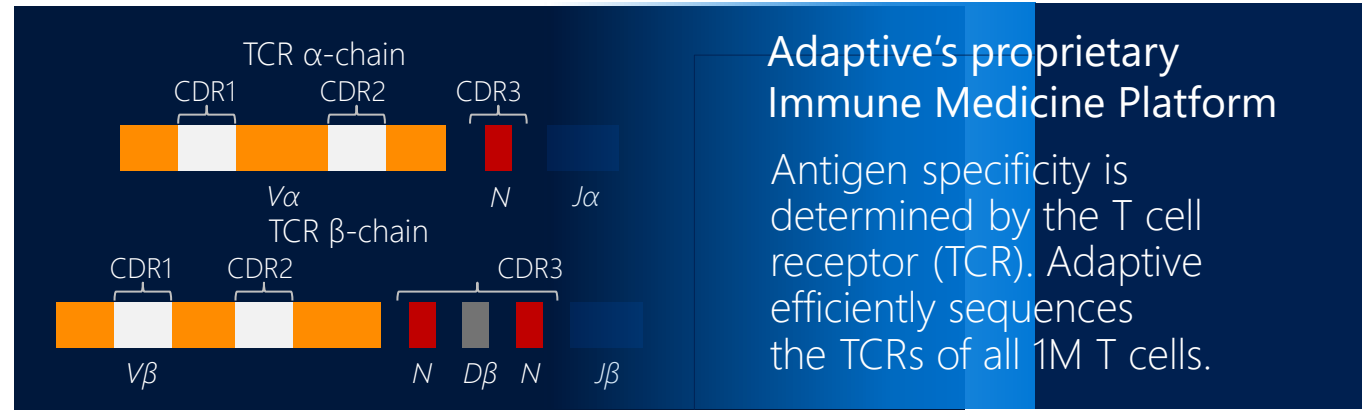
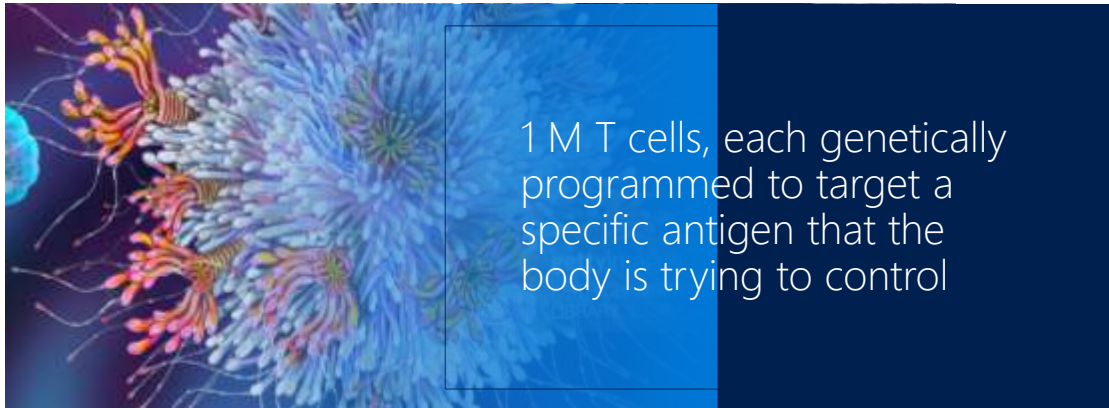
-- **Peter Lee, CVP AI & Research, Microsoft**



Microsoft Immunomics

TCR - Antigen Map Project

Learning to decode the adaptive immune system to diagnose disease



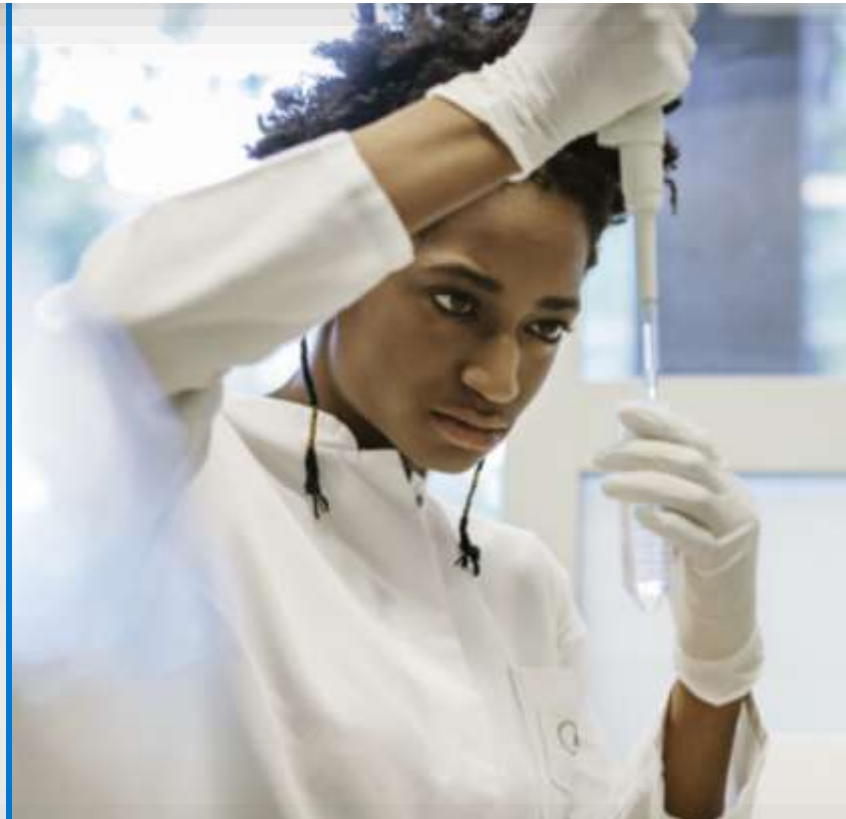
Cloud-scale machine learning to map trillions of T cells to antigens



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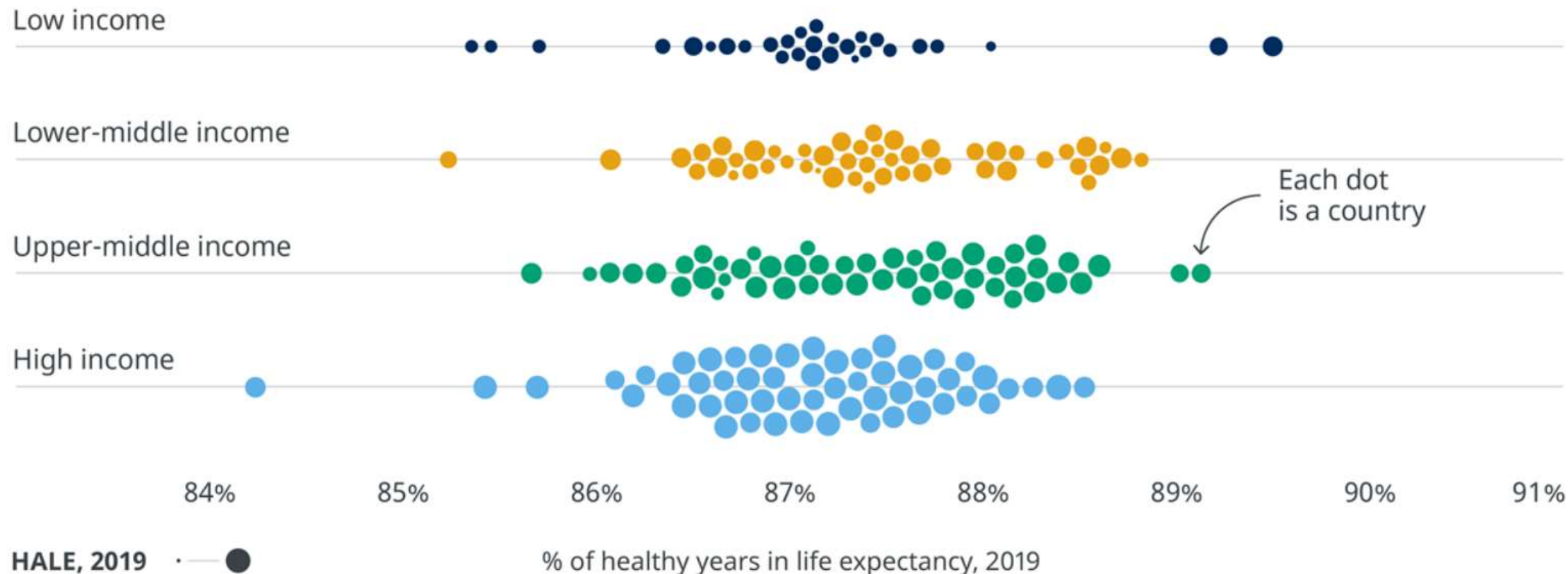
Precision Health & AI



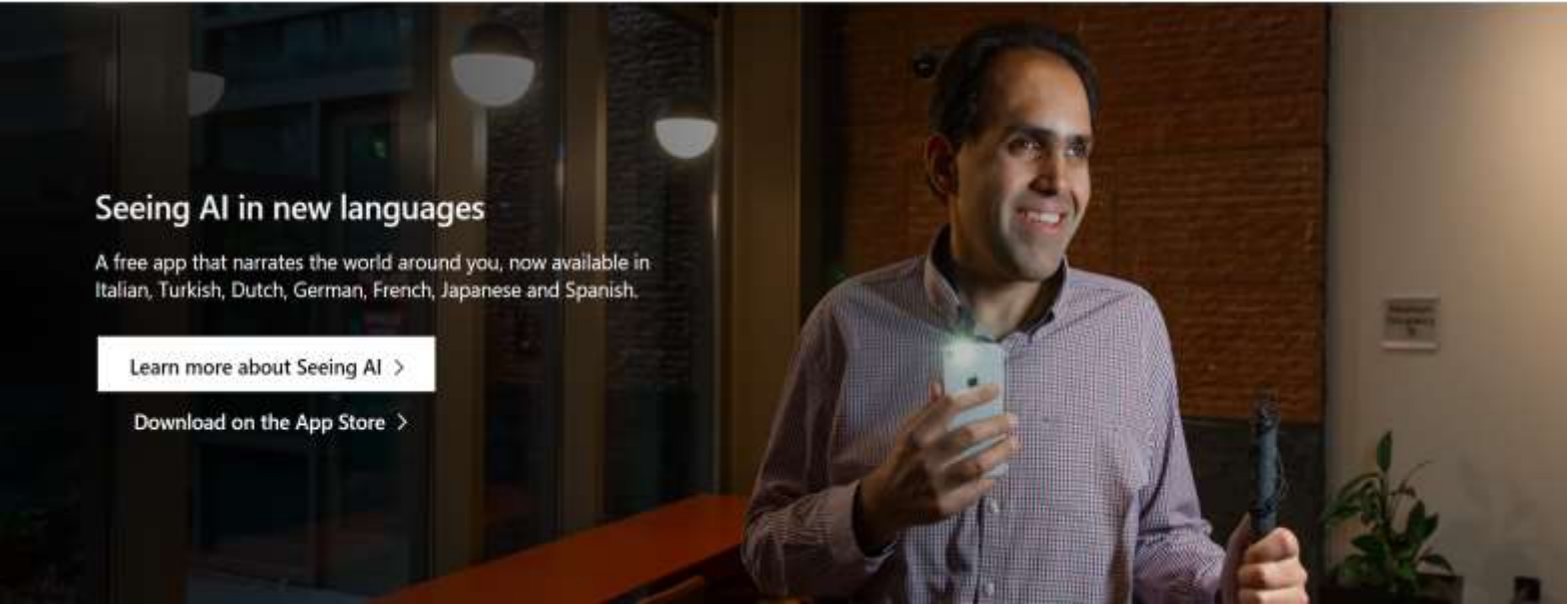
Health Access & Equity



Across the world, where are people living a higher proportion of years in good health?



Seeing AI – narrates the world around you, designed for low vision community this service uses the power of AI to describe people, text and object.



In Pursuit of Inclusive AI
Start your accessibility journey today by learning how to build experiences that are accessible for people of all abilities.



Short Text
Speaks text as soon as it appears in front of the camera



Documents
Provides audio guidance to capture a printed page, and recognizes the text, along with its original formatting



Products
Gives audio beeps to help locate barcodes and then scans them to identify products



Person
Recognizes friends and describes people around you, including their emotions



Scene
An experimental feature to describe the scene around you



Currency
Identify currency bills when paying with cash



Microsoft

Thank You

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