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Helsinki, 20-22 September 2022

Source:	WHO
Title:	Att.1 - Presentation - Overview of Global Strategy and Digital Health
Purpose:	Discussion

Contact:	Sameer Pujari	E-mail: pujaris@who.int

Abstract:	This PPT contains a presentation from the workshop on AI for health "Digital health, policymaking and Artificial intelligence (AI)".

Anup, visually impaired pupil listening at Resource centre for children with visual impairments, Jharkhand, India.

Credit: WHO/NOOR/Arko Datto

Digital health, policymaking and Artificial intelligence (AI)

Sameer Pujari

Department of Digital health and innovation
Vice Chair AI4H FG
@sameer_pujari

World Health Organization

WHO at a glance

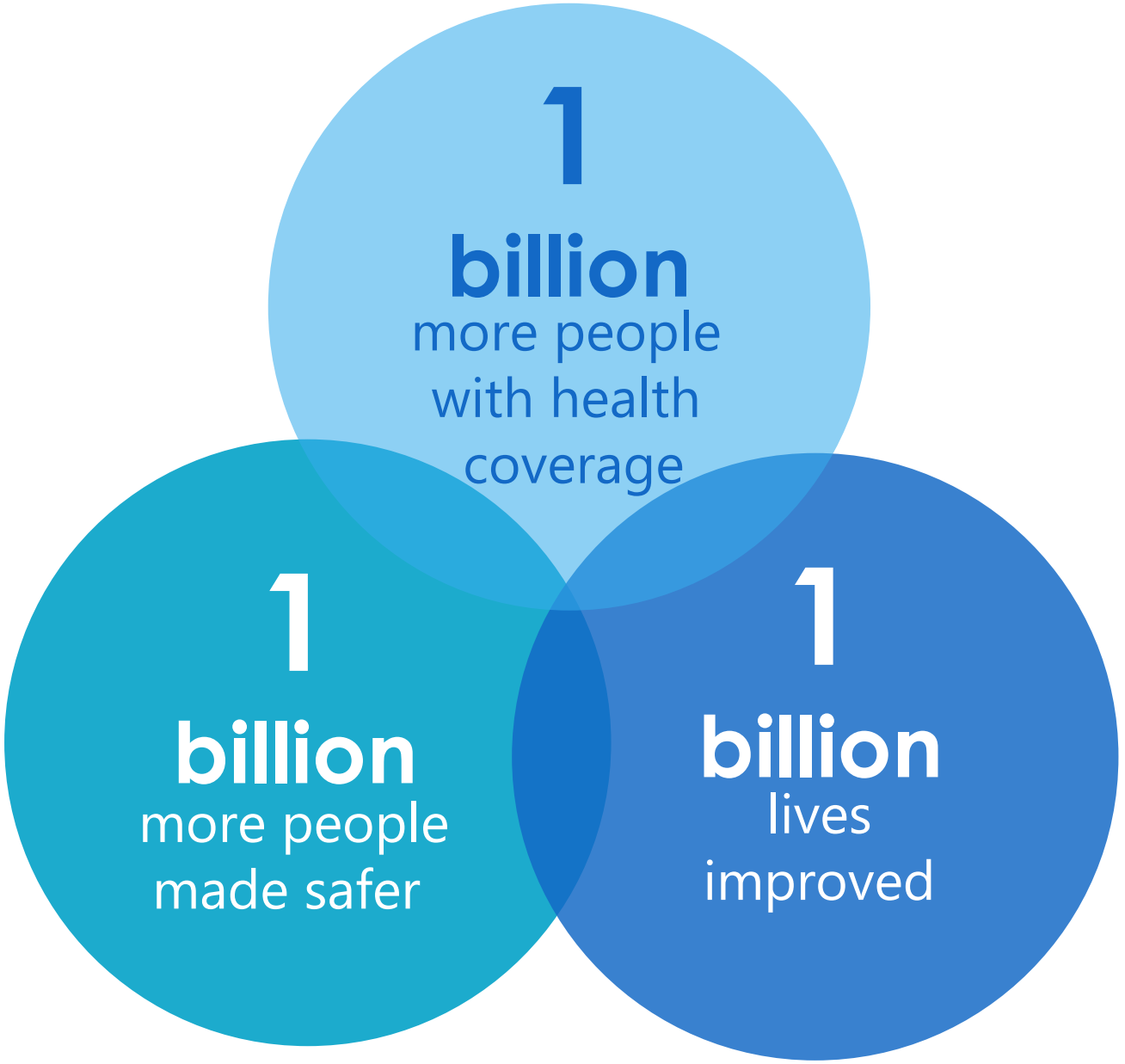
WHO at a glance

- 194 Member States
- Headquarters in Geneva; 6 regional offices
- More than **150** country offices
- More than **7 000** staff worldwide
- More than **700** institutions support WHO's work: close partnerships with UN agencies, donors, foundations, academia, nongovernmental organizations and the private sector

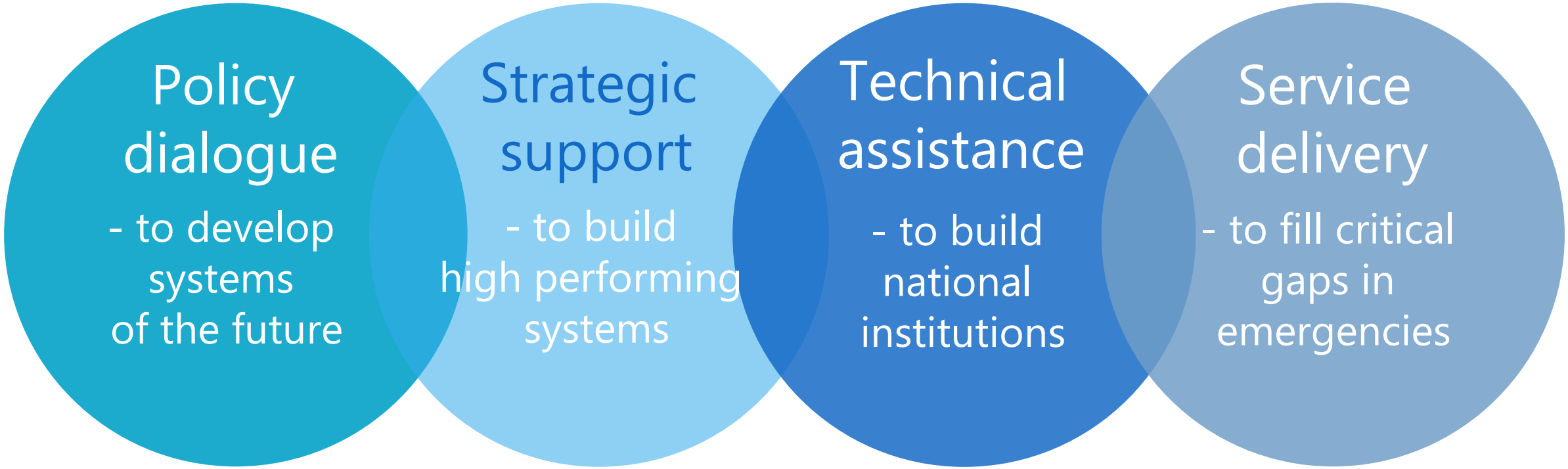
Our goals

- Promote health
- Keep the world safe
- Serve the vulnerable

HEALTH FOR ALL



How we work


Policy dialogue
- to develop systems of the future
Strategic support
- to build high performing systems
Technical assistance
- to build national institutions
Service delivery
- to fill critical gaps in emergencies
Mature health system
Fragile health system

Governance

- **World Health Assembly (WHA)**
  - 194 Member States determine the policies of the Organization at annual meeting in Geneva.
- **Executive Board (EB)**
  - Gives effect to the decisions and policies of the World Health Assembly and advises the WHA. The 34 EB members are elected for three-year terms.

Digital health governance and Artificial intelligence

The storyline

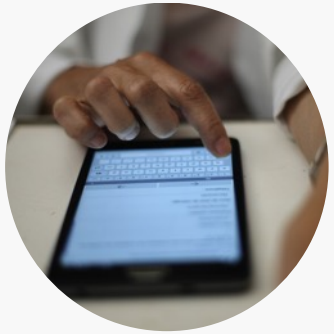
WHA58.28 on eHealth
Consider drawing up a long-term strategic plan for developing and implementing eHealth services promote equitable, affordable and universal access to their benefits

WHA71.7 Digital health
Develop… in close consultation with Member States and with inputs from relevant stakeholders… a global strategy on digital health, identifying priority areas including where WHO should focus its efforts".

Triple billion targets

2030 SDGs

2005 | 05 | 2013 | 05 | 2018 | 05 | 11 | NOW | 2023 | 2025 | 2030



WHA66.24 on eHealth standardization and interoperability

Consider developing… policies and legislative mechanisms linked to an overall national eHealth strategy

IMPLEMENTATION

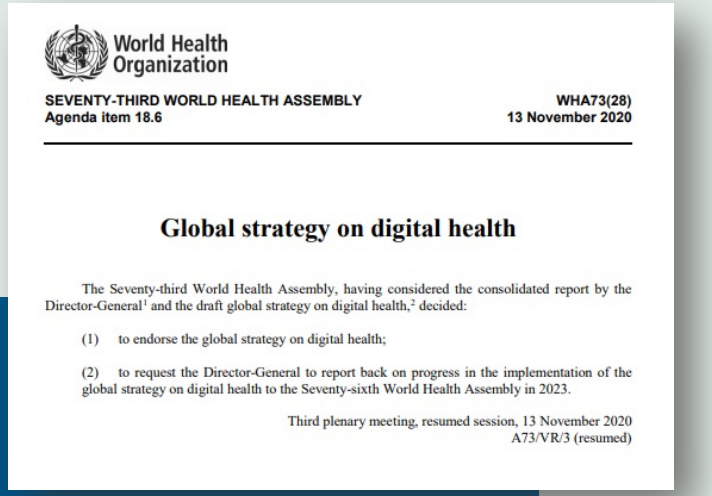
Global strategy on digital health
Improve health for everyone…affordable, scalable digital health and wellbeing…support equitable access to quality health services…implication for access, cost, quality of digital solutions

Global Strategy on Digital Health 2020 – 2025 :

Vision

To improve health for everyone, everywhere by accelerating the development and adoption of appropriate digital health solutions to achieve the health-related SDGs.

4 Strategic Objectives



World Health Organization

SEVENTY-THIRD WORLD HEALTH ASSEMBLY
Agenda item 18.6

WHA73(28)
13 November 2020

Global strategy on digital health

The Seventy-third World Health Assembly, having considered the consolidated report by the Director-General[1] and the draft global strategy on digital health,[2] decided:

(1) to endorse the global strategy on digital health;

(2) to request the Director-General to report back on progress in the implementation of the global strategy on digital health to the Seventy-sixth World Health Assembly in 2023.

Third plenary meeting, resumed session, 13 November 2020
A73/VR/3 (resumed)

SO1 Promote **global collaboration** and advance the **transfer of knowledge** on digital health

SO2 Advance the **implementation** of national digital health strategies

SO3 Strengthen **governance** for digital health at global, regional and national levels

SO4 Advocate **people-centred health systems** that are enabled by digital health

SO1 Promote **global collaboration** and advance the **transfer of knowledge** on digital health

Collaboration and knowledge transfer

Short term

- Networks and partnerships
- Capacity-building

Medium term

- Policy dialogue
- Digital health research agenda

Long term

- Knowledge management
- Digital health global repository

Output highlight

- Prioritised digital health
- Multi-stakeholder groups convened
- Strengthened National information centres for diseases surveillance

Learning….sharing…

…digital transformation of health system

…Competences and capacities

Required skills for emerging functions…

Curriculum…

SO2 Advance the **implementation** of national digital health strategies

Short term

- Support scaled implementation
- Dynamic Digital Maturity Model
- Impact assessment

Medium term

- Digital health architectural blueprints
- Norms and standards

Long term

- Build trust
- Digital platform to assess digital health solutions

Output highlight

- Accelerated Digital health implementation
- Progress through **Dynamic health maturity model**

Informed decision…

…frontline responders…policy makers…

Value, trust….

Understand challenges….

Embrace change….

SO3 Strengthen **governance** for digital health at global, regional and national levels

Digital health governance

Short term

- Prioritise national investment
- **Evidence-based technical documents**

Medium term

- **Regulatory framework**
- Country level governance structure

Long term

- Policy actions in the digital health ecosystem
- **Knowledge transfer for decision making**
- **Regulatory framework for AI**

Output highlight

- Governance established
- Guidance on digital hospitals , digital clinical trials and digital therapeutics developed
- Global interoperability guidelines developed
- Guidance on health data security

Future policy….agenda setting…

…Evidence-based interventions

…Governance….

Required skills

Inclusive culture…

SO4 Advocate **people-centred health systems** that are enabled by digital health

Short term

- Global minimum standards for electronic health records
- **Ethic frameworks**
- **Data security and governance**

Medium term

- Promote digital health interventions
- **Health data and interoperability**

Long term

- **Personalized medicine**
- **Research synthesis**

Output highlight

- Improved digital health literacy
- Prioritized digital health technologies and programs
- Framework on digital health tools
- Guidance on personalised medicine developed

Develop and validate digital interventions….

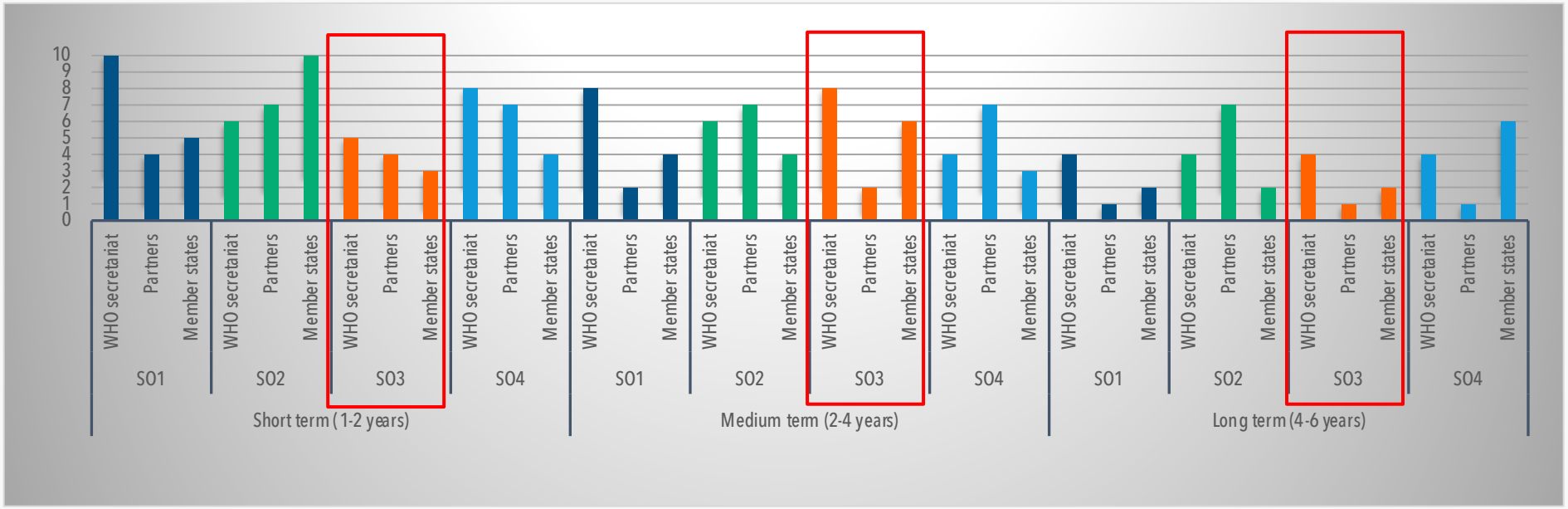
…Digital health literacy

…equitable access to service, products and information

Digital divide

Equality….

172 Actions agreed by Member States under the Global Strategy on Digital health
35 actions dedicated for strengthening **digital health governance**



Short term (1-2 years)	**73**
WHO secretariat	29
Partners	22
Member states	22
Medium term (2-4 years)	**61**
WHO secretariat	26
Partners	18
Member states	17
Long term (4-6 years)	**38**
WHO secretariat	16
Partners	10
Member states	12
Grand Total	**172**

- SO1-ST01-Analyse digital health network landscape
- SO1-ST02-Provide policy dialogue for digital prioritization at national level
- SO2-ST04-Capacity building for strategy implementation and investment
- SO2-ST05-Digital health maturity model
- SO3-ST01-Criteria for impact assessment
- SO4-ST06-Develop an ethics framework for technologies for health

Short term (ST)	**73**
WHO secretariat	**29**
Assess	3
Create	14
Faciliate	4
Participate	1
Promote	2
Support	5
Partners	**22**
Create	1
Faciliate	1
Participate	8
Promote	2
Support	10
Member states	**22**
Assess	5
Create	5
Faciliate	5
Participate	2
Promote	4
Support	1
Medium term (MT)	**61**
Long term (LT)	**38**

Actions relevant to digital health governance for partners

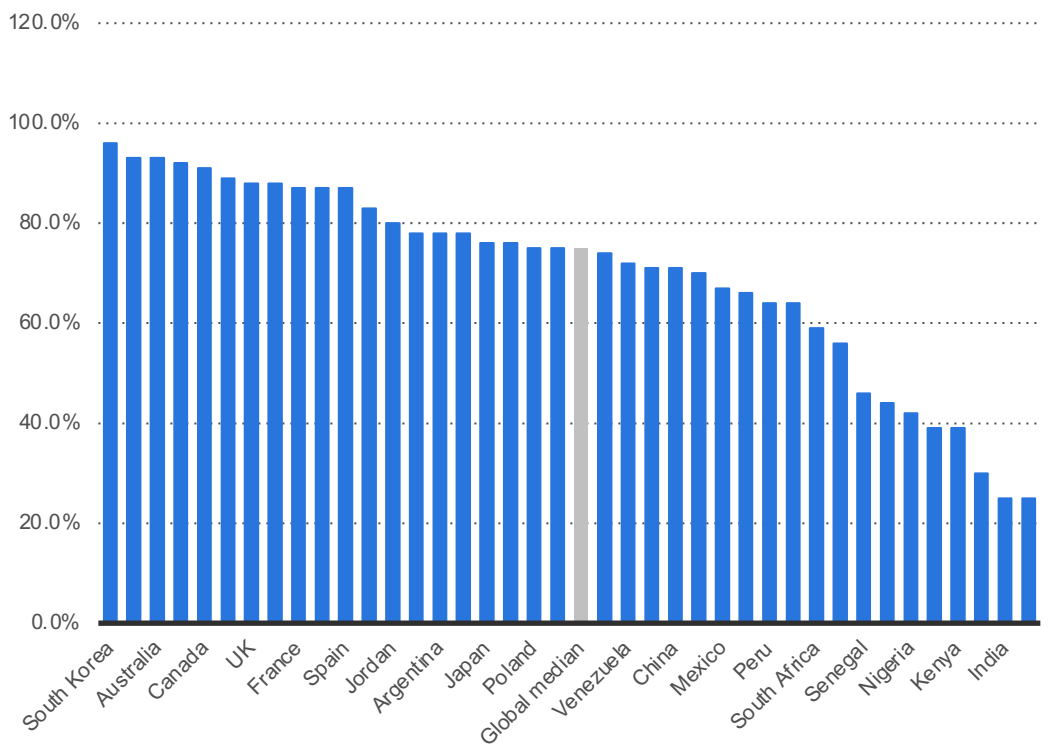
Strategic objectives	Timeline	Stakeholders	Description
SO3	Short term (1-2 years)	Partners	Support and contribute to good governance of digital health, adherence to national policies and programmes, and compliance and use of standards required.
SO3	Short term (1-2 years)	Partners	Support the Secretariat in establishing international health data regulation, a framework for regulating, benchmarking or certifying artificial intelligence and digital health medical devices.
SO3	Short term (1-2 years)	Partners	Support the Secretariat in the development of a guideline on global interoperability standards for digital health.
SO3	Short term (1-2 years)	Partners	Support the Secretariat to provide surge training capacity in response to acute public health events
SO3	Medium term (2-4 years)	Partners	Develop research on cutting-edge health technologies and share the evaluation results of the implementation of digital health interventions.
SO3	Medium term (2-4 years)	Partners	Support the Secretariat in the development of global guidance on planning, development and use of digital hospitals and digital therapeutics, with partners' expertise during routine and emergency health service delivery.
SO3	Long term (4-6 years)	Partners	Support practices and innovations that deliver positive health outcomes and enhance overall quality of health care delivery aligned with the Sustainable Development Goals.

Digital and AI

Emerging areas of interests

Resources and opportunities

Opportunities: Leverage Digital Technologies!

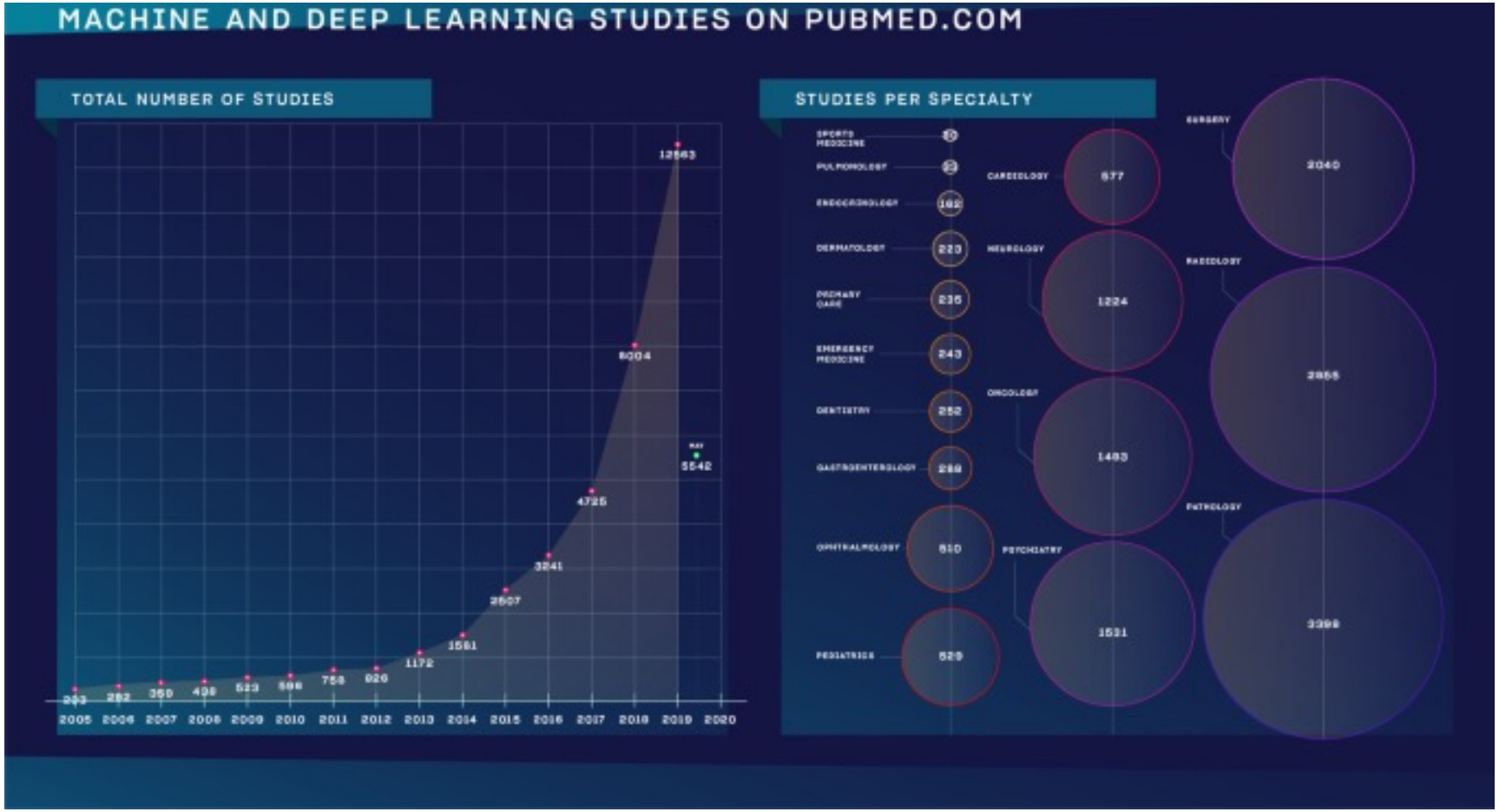


Access to **internet** (left) and growing number of **smartphones** (right)

(Pew Research Center © Statista 2018 & GSMA Intelligence)

Leverage Digital Technologies!

Research and **publications** on AI for health are also increasing



Radiology

Pathology

(Meskó and Görög, 2020)

What is FG-AI4H?

Established in 2018 as **a joint focus group** between **ITU** and **WHO**

Initial mandate to **deliver a framework for guiding** AI for health development and implementation

Exists at the **interface** between multiple fields and stakeholders
(machine learning/AI, medicine, public health, government, regulation, statistics, ethics, etc.)

AI for Health
An ITU Focus Group
In collaboration with WHO

Ethics and governance of Artificial intelligence for Health

WHO guidance and its implementation

The WHO guidance on Ethics & Governance of Artificial Intelligence for Health, published in June 2021

- Legal, regulatory and non-legal measures for ethical use of AI for health.
- Identified areas of governance that could resolve the identified ethical challenges and integrate the six consensus principles.
- 47 recommendations for diverse stakeholders to implement.

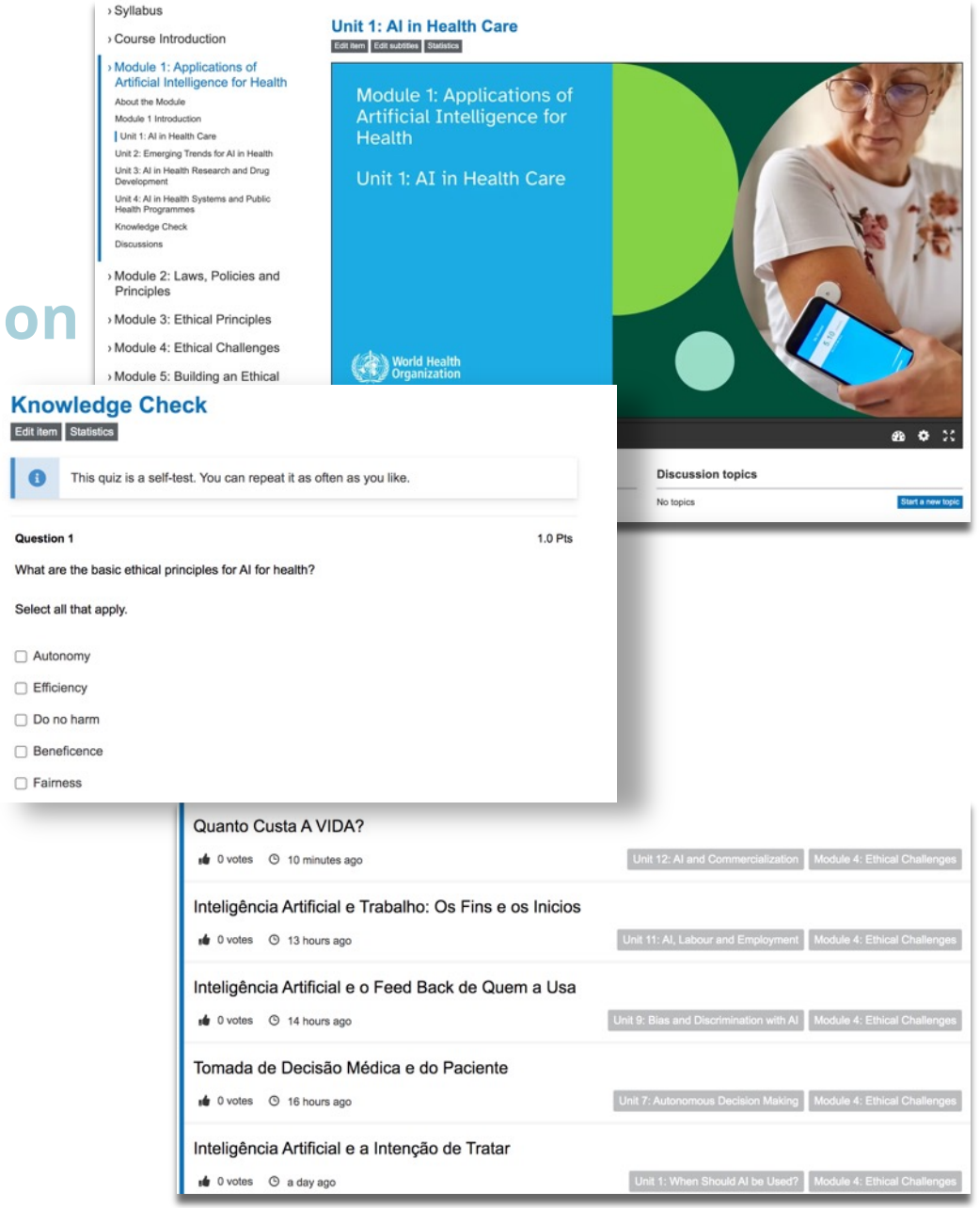
Ethics and governance of Artificial intelligence for Health

WHO guidance and its implementation

Introductory course published in June 2022 on OpenWHO.org

Accelerate **translating** knowledge from the guidance into **actionable information** to support **governments**, **AI developers** and **healthcare providers'** activities.

Learners from 120+ countries



WHO-ITU AI4Health focus group

AI benchmarking for all

A collaborative initiative between WHO and ITU

- Bring together specialists to develop a benchmarking framework for international standards
- Steer the creation of policies to ensure the safe, appropriate use of AI in the health sector
- Identify use cases for potential scaling up
- Potentially transforming to a Global initiative

AI for Health
An ITU Focus Group
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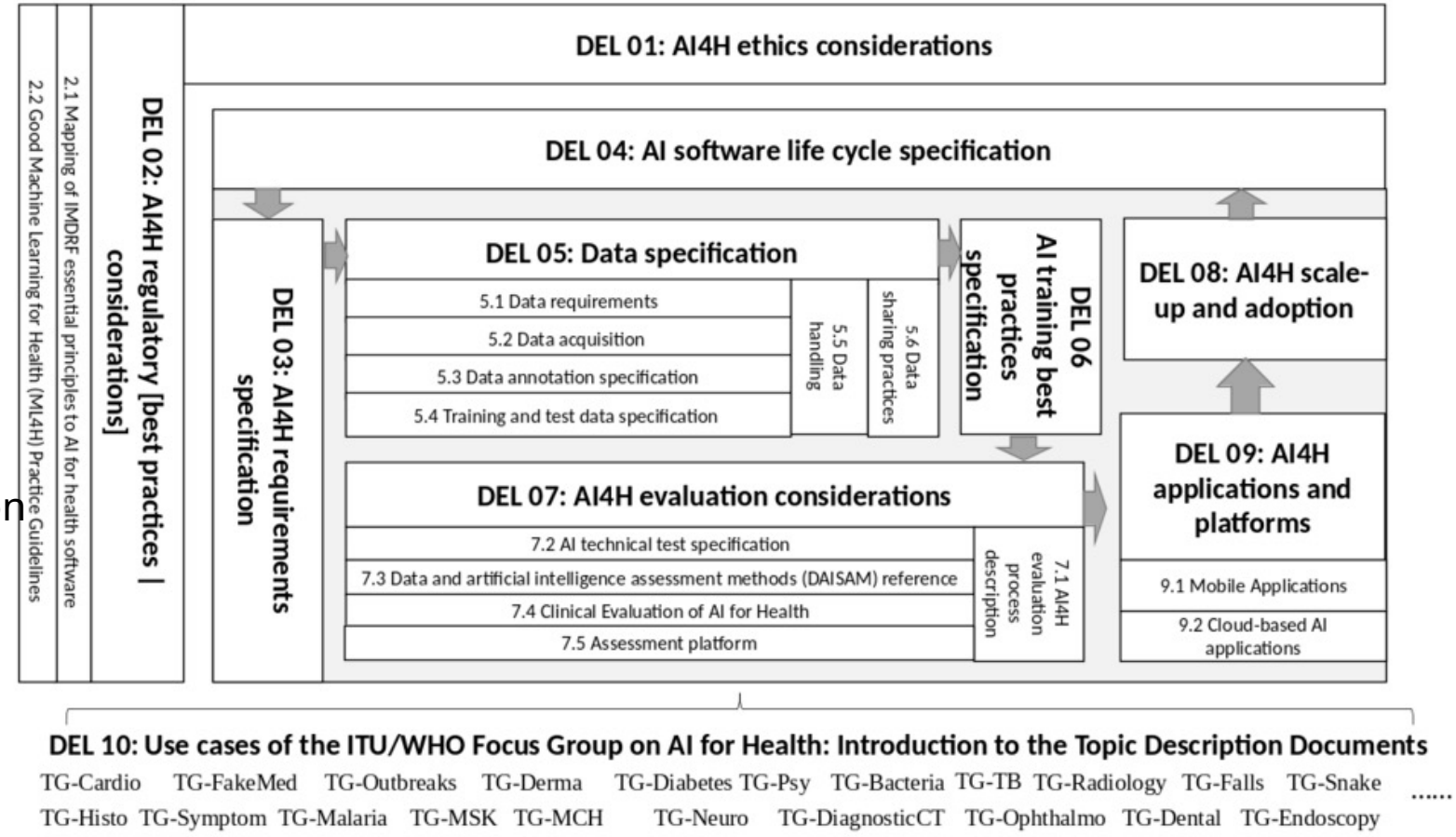
Deliverables

1. AI4H ethics considerations
2. AI4H regulatory [best practices | considerations]
3. AI4H requirements specification
4. AI software life cycle specification
5. Data specification
6. AI training best practices specification
7. AI4H evaluation considerations
8. AI4H scale-up and adoption
9. AI4H applications and platforms
10. Use cases of the ITU-WHO Focus Group on AI for Health

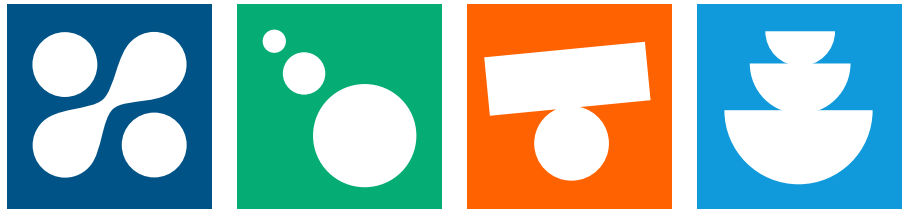


Current issues in digital health governance

- The role of **different actors** (private sectors, civil societies, research institutes etc.) not fully evaluated and planned in tackling digital health governance issues, how it engages in **decision-making**, its benefits and potential risks

- Successful experience does exist, yet few are well documented, highlighting the need for a **comprehensive mapping** and **guidance** tailored for different actors to interact in the **ecosystem**

Increasing interests in applying AI in health topics



Food Fortification and security

Cervical cancer

Medical devices

Tuberculosis

Ageing

Ethics and governance

Regulatory frameworks

Traditional medicine

Knowledge transfer (training)

Takeaway

What should be done for digital health governance?

Strengthen the governance of digital health at national and international levels

- Leverage **existing** structures
- Create sustainable and **robust** governance structures, including regulatory frameworks,
- Build **capacity** for the **implementation** of evidence-based and proven digital health **solutions**

What should be done for digital health governance?

Coordinate investments

- To assess, promote and disseminate innovative health technologies for **national scaled** digital health programmes
- Apply a **person-centred** approach to facilitate actions and investments based on informed decisions

We must ensure the Digital Health transformation is safe, sustainable and leaves no one behind.

Thank you.

Todays digital health is tomorrows health and wellbeing

Credit: WHO/NOOR/Arko Datto