

Technical brief

Lead / AI and Digital Frontiers in Health Team
Department of Digital Health and Innovation (DHI)

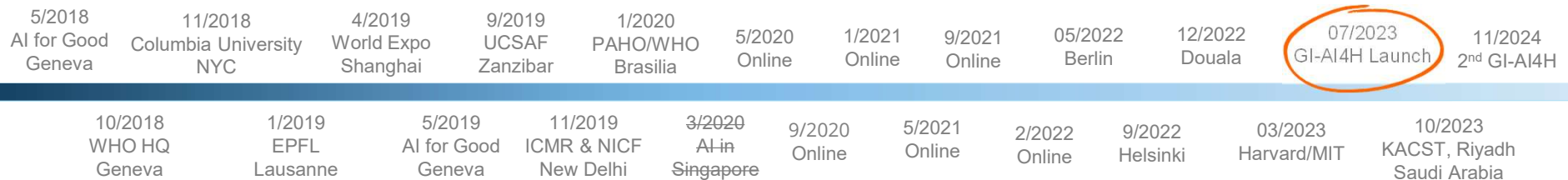




WHO-ITU AI4Health focus group

AI benchmarking for all

- Established in **2018** as a **joint focus group** between **ITU** and **WHO** and 100+ experts and researchers.
- Brought together specialists to develop a **benchmarking framework** for **international policies and standards**.
- Migrated into a Joint UN Global Initiative on AI for health from July 2023





AI for Health
An ITU Focus Group
In collaboration with WHO

LAYING DOWN THE FOUNDATION OF THE WORK ON AI & TRADITIONAL MEDICINE



Dr. Vaidya Rajesh Kotecha, Secretary, Ayush gave a presentation on “*Role of Artificial Intelligence in Traditional Medicine and Digital Initiative of Ayush*” during the WHO-ITU Focus Group meeting on Artificial Intelligence for Health (FG-AI4H) meeting held in Helsinki, Finland.

Global Initiative on AI for Health (GI-AI4H)



Launched on July 6, 2023!



Enable

Standards,
governance,
policies, and
guidance on
evidence-based
AI4H



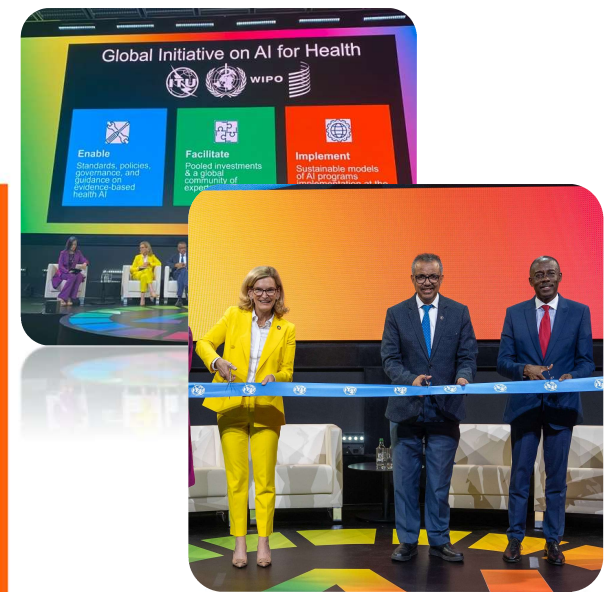
Facilitate

Pooled
Investments &
a global
community of
experts



Implement

Sustainable
models of AI
ecosystem at the
country level



Ribbon cutting of the Global initiative on AI for Health at AI for good summit on 6 July 2023

(L-R: Ms. Doreen Bogdan-Martin (SG ITU), Dr. Tedros Adhanom Ghebreyesus (DG WHO), Mr. Edward Kwakwa (ADG WIPO))

Enable policies, standards, guidance on AI for health



Ethics and Governance of Artificial Intelligence for Health



Generating Evidence for Artificial Intelligence-based Medical Devices



Regulatory Considerations on Artificial Intelligence for Health



Ethics and Governance of AI for Health: Large Multi-Modal Models

Over 150,000 + Downloads



WHO Online introductory course on Ethics and governance of AI for health





Enable policies, standards, guidance on AI for health

Publications on AI across different facets of Health

1

Policy briefs on the use of AI in health



2

Workbook on the Global Initiative on AI for Health

- Systematizing the lived experiences of attendees onsite and online during the GI-AI4H.
- Aiming to build a standard of reporting strategic events and workshops.

3

Policy, science and technical papers



The journey

Hand-by-hand in continuous technical collaboration

Milestone 1 (2018-2023)

- Collaboration under the WHO-ITU Focus Group on AI for Health and the Topic Group – Traditional Medicine (TG-TM)

Milestone 3 (2024)

- Strategic planning meeting of the traditional Medicine Unit and the Global Traditional Medicine Centre (GTMC) with participation of DHI/AI Team

Milestone 5 (2024)

- Mapping the Application of AI in TM: technical brief
(coming soon!)

Milestone 2 (2023)

- WHO Traditional Medicine Global Summit in Jamnagar with participation of DHI/AI Team

Milestone 4 (2024)

- Global Technical meeting: AI for Global Health. Advancing TM in New Delhi and the WHO Global TM Library

The journey

Hand-by-hand in continuous technical collaboration: outcomes



Purpose

Addressing the increasingly value and relevance of AI in health care and leveraging its potential to benefit TM

- 1 **Address the rapidly evolving AI landscape** and its use in TM
- 2 **Showcase global, regional and Member State examples** on how AI is being used in TM
- 3 **Highlight risks, challenges, opportunities and gaps** for evidence-informed decision-making and policy-making
- 4 **Identify potential actions** for effective and responsible integration of AI into TM

Intended users

Four groups specifically crafted for AI in TM

Policymakers and government



Credits: Studio 365

Identifying approaches to integrate and implement AI systems

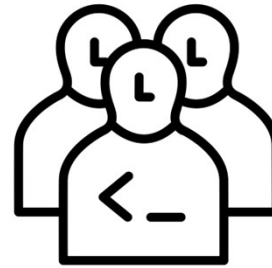
TM practitioners and users



Credits: Thanga Vignesh

Explore and access to information, and engage in active participation in AI

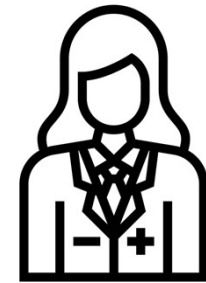
Digital technology experts



Credits: Yu luck

Exploring, designing and developing AI systems & medical devices

Health systems and technical experts



Credits: Eucalyp

Deploy and use such medical devices and AI systems

Topics and themes

Two exercises mapping covering more than 150+ literature documents

Medical	Technological	TM
AI in health care for TM	Global perspectives on ICT and AI in TM	Ethical considerations to indigenous knowledges
ICT/AI in drug discovery for TM	Ethical considerations for AI in health and TM	IP rights
AI in TM diagnostics	Digitalization of traditional knowledge (indigenous medical systems)	Reusable knowledge bases for TM
Electronic health records and standards in TM	Technological	Prakriti assessment and personality analysis for Ayurgenomics
AI in TM-specific supply chain management	AI and digitalization policy agendas (global, regional, country)	
	Risk identification & management, AI lifecycle	

Current uses and cases of AI in TM

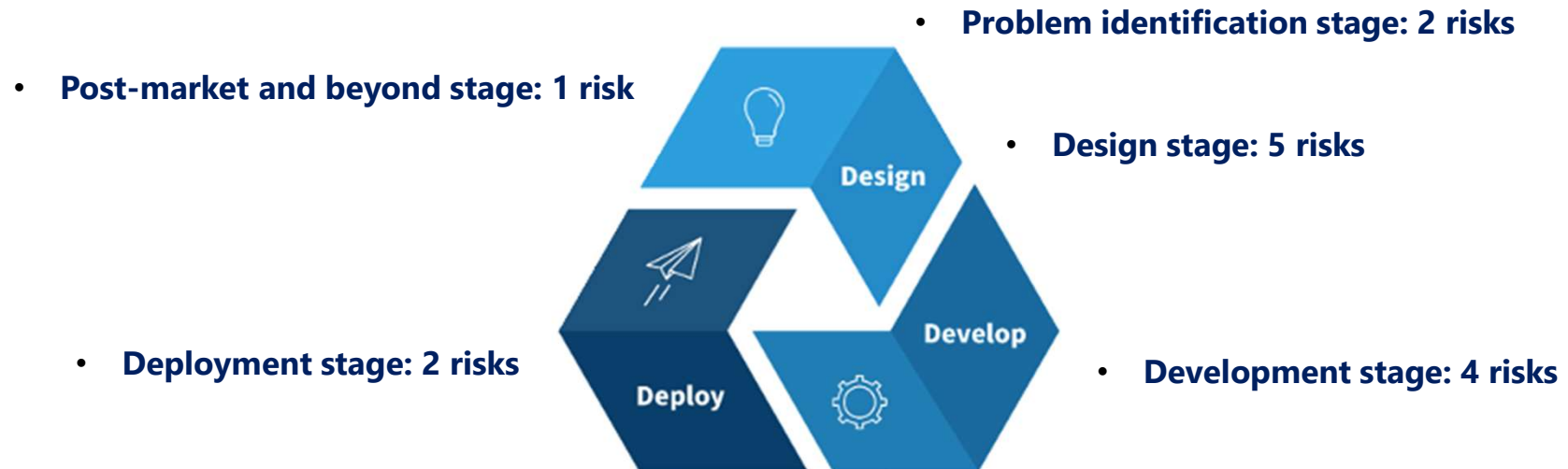
Domain	Topic	Cases
In healthcare	<ul style="list-style-type: none"> Diagnosis and prediction-based diagnosis 	2 cases
In clinical care	<ul style="list-style-type: none"> AI-based clinical decision support systems 	1 case
In health research and drug development	<ul style="list-style-type: none"> Pattern recognition Genetic information analysis Identification and direct utilization of TM plants 	4 cases
In health systems management	<ul style="list-style-type: none"> Utilizing hospital management information systems 	3 cases
Preserving and advancing TM knowledge	<ul style="list-style-type: none"> Online repositories for TM knowledge Databases for protection against biopiracy Conservation and identification of biodiversity 	3 cases
In policymaking for TM	<ul style="list-style-type: none"> Data governance models Agreements between national entities and Indigenous Communities in data advancement 	5 cases
Domains of interest where no evidence was found	<ul style="list-style-type: none"> Docking-simulation studies Pathway identification Artificial chemical sensors 	

Risks and challenges in the application of AI in TM

8 overarching risks

- **Ethics & Governance of Artificial Intelligence for Health**
- **Regulatory Considerations on AI for Health**
- **TM strategic documents and agendas**

Set of risks throughout the AI lifecycle and beyond



General/Standard AI lifecycle model

Next steps

- 1 Governance: Guidance on Artificial Intelligence and Intellectual Property with Traditional Medicine as a use case
- 2 Knowledge: Global Library on AI and Traditional Medicine
- 3 Health work-force: Training modules for health workers and end users
- 4 Global community of practice
- 5 Implementation support

