#### FGAI4H-O-041

Berlin, 31 May – 2 June 2022

Source: WHO

Title:

Workshop: WG-Ethics - Guidance of Ethics and Governance of Artificial

Intelligence for Health

**Purpose:** Discussion

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**Abstract:** This PPT contains a presentation from the WG-Ethics workshop on

"Guidance of Ethics and Governance of Artificial Intelligence for Health".

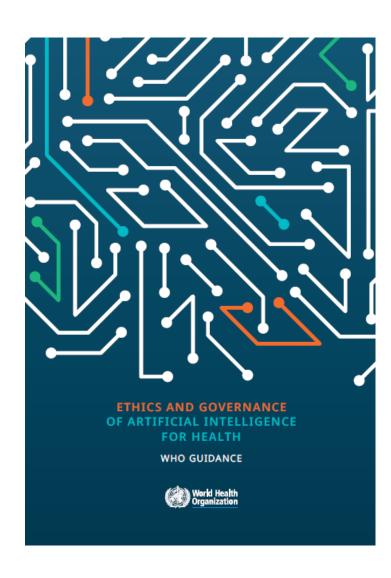


WHO Guidance Ethics & Governance of Artificial Intelligence (AI) for Health: Dissemination & Implementation

PD Dr. Andreas Reis, MD MSc Co-Unit Head, Health Ethics & Governance, WHO Geneva

#### **WHO Guidance document**





- Opportunities and ethical challenges
- Consensus principles
- Governance
- Recommendations
- Checklists for MoH, designers, providers

#### **Expert Group**

- Najeeb Al Shorbaji (Jordan)
- Arisa Ema (Japan)
- Amel Ghoulia (Tunisia)
- Jennifer Gibson (Canada)
- Kenneth W. Goodman (USA)
- Jeroen van den Hoven (The Netherlands)
- Malavika Jayaram (Singapore)
- Daudi Jjingo (Uganda)
- Tze Yun Leong (Singapore)
- Alex John London (USA)



- Partha Majumder, Co-Chair (India)
- Tshilidzi Marwala (South Africa)
- Roli Mathur (India)
- Timo Minssen (Denmark)
- Andrew Morris (United Kingdom)
- Daniela Paolotti (Italy)
- Maria Paz Canales (Chile)
- Jerome Singh (South Africa)
- Effy Vayena, Co-Chair (Switzerland)
- Robyn Whittaker (New Zealand)
- Yi Zeng (China)

# **Key ethical challenges**



- When should AI be used?
- Al and the digital divide
- Data collection and use
- Accountability and responsibility for use of Al
- Autonomous decision making

- Bias and discrimination associated with AI
- Risks of AI to safety and cybersecurity
- Impacts of AI on labour and employment in healthcare and medicine
- Challenges in commercialisation of AI for healthcare
- Artificial intelligence and climate change

## **Consensus principles**



- Protect autonomy.
- Promote human well-being, human safety and the public interest.
- Ensure transparency, explainability and intelligibility.
- Foster responsibility and accountability.
- Ensure inclusiveness and equity.
- Promote AI that is responsive and sustainable.

#### **Governance of AI for health**



- Legal, regulatory and non-legal measures for ethical use of Al 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.





- Designers and other stakeholders should ensure that AI systems are designed to perform well-defined tasks with the accuracy and reliability necessary to improve the capacity of health systems and advance patient interests.
- Governments should enact laws and policies that require government agencies and companies to conduct impact assessments of AI technologies.
- Companies must adhere to national and international laws and regulations on the development, commercialization and use of AI for health systems.
- Governments and international agencies should engage nongovernmental and community organizations, particularly for marginalized groups, to provide diverse insights.
- Civil society should participate in the design and use of AI technologies for health as early as possible in their conceptualization.

## **Considerations (Checklists)**



- Guidance document includes considerations with practical steps to assist with implementation.
- Checklists for specific target audiences:
  - Designers (programmers)
  - Ministries of Health
  - Providers (hospital systems and health-care professionals)



#### **Briefing of WHO Member States**

- At the request of WHO DG
- Over 100 participants
- High interest
- Request for support (e.g. model legislation, training of HCW etc.)
- Regional workshops and country missions planned

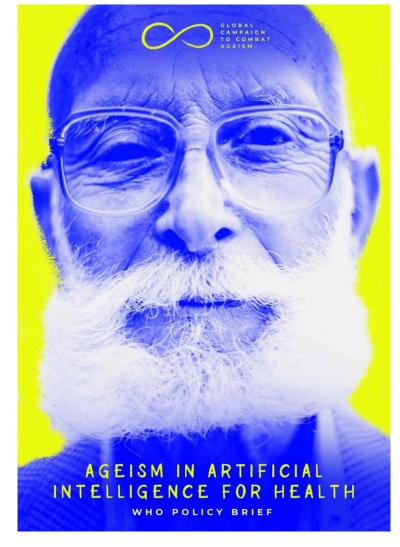


#### Ethics & governance of AI used for diagnosis, monitoring, and care for TB

- Collaboration with WHO TB Department (and Stop TB Partnership)
- Discussions with Global Fund to Fight AIDS, TB, and Malaria
- Union Conference: presentation on the ethics and governance of AI for health as
  it relates to TB



- Collaboration with Healthy Ageing Unit at WHO
- Policy brief on Ageism and AI launched (February 2022)
- examines the use of artificial intelligence (AI) in medicine and public health for older people
- conditions in which AI can exacerbate or introduce new forms of ageism
- Legal, non-legal and technical measures that can be used to minimize the risk of ageism in AI and maximize AI's benefits for older people





#### **Importance of Design for Values**

- Workshop 12th November 2021
- Jointly organized between Technical University of Delft and WHO
- Participation of Thomas Wiegand



#### **Collaboration with Civil Society**

- WHO/Privacy International Workshop: Ethical Challenges and
   Opportunities with the use of AI for Health and the role of civil society
- 7th December 2021
- A second forum planned in 2022



WHO/ITU Focus Group of AI for health, including ethics subgroup and other subgroups (to provide an ethics perspective)

- Discussion for ethics subgroup held in October 2021
- Supported drafting of basic Q&A document
- Supported clinical evaluation guidance, for which ethics guidance was a key component

#### Outlook



- Dissemination of Online training course on Ethics & Governance of AI4
- Additional guidance and tools in specific areas, e.g. drug development
- Support to Member States: Regional workshops and country missions
- Continued participation and support to various initiatives by the FG-AI4H

