

FORUM: World Health Assembly (WHA)

QUESTION OF: Addressing the safety concerns of technology and artificial intelligence implementation in healthcare services

MAIN SUBMITTER: The Republic of South Africa

CO SUBMITTERS: United States of America, India, Japan, Israel, Iran

THE WORLD HEALTH ASSEMBLY,

Noting that the present socio-evaluation is aimed at comprehending the principles of quick growth of healthcare services with the usage of modern technology and artificial intelligence (AI),

Acknowledging existing national and international regulatory frameworks aimed at ensuring the safety and efficacy of medical technologies,

Recognizing that technology and artificial intelligence (AI) are rapidly evolving fields that hold significant potential to enhance healthcare delivery, improve patient outcomes, and streamline operations within healthcare systems,

Realizing some drawbacks of an AI system, for example inaccuracy in the diagnosis, leakage of patient information, and ethical issues of patient identity theft,

Addressing the growing concerns related to safety, ethics, and privacy in the implementation of AI and technology in healthcare,

1. Urges the rise of public awareness to the referring to medical technologies that are utilized to diagnose people's health and well-being, through ways such as but not limited to:
 - a. collaborating with relevant UN organizations, such as the World Health Organization (WHO), International Telecommunication Union (ITU) and World Intellectual Property Organization (WIPO) to spread awareness of potential risks in ways such as but not limited to:
 - i. contacting hospitals such as the Mayo Clinic, which are mostly using AI related medical technologies, including but not limited to robotic surgery systems, telemedicine, diagnostic imaging and genomic sequencing technologies

- ii. raising social media sponsors to promote the new usage of AI, by contacting agencies or worldwide organizations and promoting accurate usage of AI in corporations \
- 2. Further urges member-states to promote collaboration in the field of AI and healthcare through ways such as but not limited to:
 - a. including representatives from different countries and regions, including ethicists, technical experts, medical professionals, and patient rights advocates
 - b. expanding collaboration between public and private firms for the improvement of safe AI application
 - c. maintaining transparency in reporting findings related to AI performance and safety incidents which may lead to discussions and presentations of modern trends focused on better implementation of artificial intelligence into healthcare products and services through ways such as but not limited to:
 - i. supporting member nations to begin drafting common guidelines for the basis of future national policies on using direct data without modifications and abridge to make it into mandatory requirement
 - ii. giving the equipment supervision department the device program and passing card to enter and exit such firms to empower them to view and monitor at any time;
- 3. Encourages the establishment of international non-governmental oversight committees that focus on monitoring AI applications in patient diagnosis, treatment recommendations, data management, and administrative processes and ensure the ethical, safe, and effective use of Artificial Intelligence (AI) technologies in healthcare settings, which would serve the roles but not limited to:
 - a. maintaining a diverse group of stakeholders from related companies or corporations, including:
 - i. medical professionals with expertise in AI applications,
 - ii. ethicists to address moral implications of AI usage which come from NGOs that deal with technology issues
 - iii. patient representatives via an inbox placed in the clinics or volunteers to ensure patient perspectives are included
 - b. managing and assisting in fulfilling related responsibilities for adequate and accurate AI usage, through ways such as but not limited to:

- i. performing frequent audits of AI systems to examine adherence to ethical standards and legal requirements and monitor compliance with existing norms and legislation governing AI use in healthcare
 - ii. collecting data on the performance and outcomes of AI systems used in healthcare
 - iii. publishing yearly reports on AI's efficacy, safety, and ethical implications in healthcare, such as patient outcomes, mistake rates, and bias or discrimination occurrences
 - c. engaging with diverse stakeholders to obtain insights and comments on AI usage, and public forums will be held biannually to communicate oversight findings and solicit community participation
 - d. providing recommendations for policy development aimed at enhancing the responsible use of AI in healthcare; this includes suggesting regulatory frameworks that address potential risks while promoting innovation;
4. Recommends the creation of specialized training programs for healthcare professionals to enhance their understanding and effective use of AI systems, focusing on educating the public on potential dangers and drawbacks of AI applications through:
 - a. using community seminars and online webinars explaining risks such as data privacy breaches, algorithmic biases, and misdiagnoses
 - b. having informative campaigns via social media, television, and other accessible platforms to ensure broad outreach and understanding
 - c. providing practical workshops tailored to specific AI tools and systems, such as but not limited to:
 - i. providing hands-on sessions teaching how to operate diagnostic AI tools, like image recognition for radiology
 - ii. performing role-playing scenarios to simulate real-world interactions between healthcare workers, patients, and AI systems
 - iii. starting training modules on troubleshooting and recognizing errors in AI generated recommendations
 - d. ensuring the continuity of learning as technology advances in ways such as but not limited to:
 - i. establishing e-learning platforms with regularly updated modules on new AI developments
 - ii. creating partnerships with AI developers to provide healthcare professionals with early access to updates and training materials

- iii. offering certifications and refresher courses to ensure consistent proficiency among professionals as AI tools evolve;
5. Encourages global health organizations, such as the World Health Organization (WHO), International Telecommunication Union (ITU), and World Intellectual Property Organization (WIPO), to develop and regularly update safety guidelines for the use of advanced healthcare technologies, including AI and telemedicine, in ways such as but not limited to:
- a. establishing protocols including but not limited to:
 - i. creating data protection aligned with international privacy standards
 - ii. adding algorithm transparency to ensure clarity in AI decision-making
 - iii. adding system reliability through rigorous pre-deployment testing
 - b. updating guidelines using ways such as but not limited to:
 - i. researching from institutions such as FUTURE-AI and similar global initiatives
 - ii. having advancements in machine learning and cybersecurity
 - c. ensuring compliance in ways such as but not limited to:
 - i. mandating integration into national health policies
 - ii. linking adherence to international funding and aid eligibility
6. Encourages member states to develop comprehensive regulatory frameworks and protection services programs to ensure the safe and ethical implementation of AI in healthcare in such ways such as but not limited to:
- a. adding low-level AI code that is easier to control high-level programs and improve its stability as it is much more efficient at avoiding memory leaks and buffer overflows due to its memory allocation and access patterns
 - b. introducing an early and strict licensing and testing (by who) of the AI systems before they are put into the market in such ways but not limited to:
 - i. ensuring that advantages are promoted if not harmful with precautionary regulation
 - ii. doing post deployment constant assessment of the performance of the AI systems
 - iii. recognizing whether the facilities meet the required safety or stability standards

- c. establishing different prosecutorial agencies such as Department of Justice (DOJ) and Health and Human Services (HHS) and equipped them with trained personnel that can quickly find any problems in both the software and hardware of AI;
- d. setting policy on the protection of data and secure computing environment to the patient information in such ways but not limited to:
 - i. restricting changes, only programmers and engineers who understand the data and control the data can make changes
 - ii. restricting conducting comprehensive disclosure, only disclosing patient information to the program departments that need to be used
- e. providing human-led healthcare, to reduce risks of over-dependence of AI,
- f. endorses member states to implement pilot programs aimed to test the safety of the new technologies before widespread adoption within their healthcare systems by ways such as but not limited to:
 - i. establishing clear metrics and solving the black box problem such as how they aim to do with Nvidia's AI to see the success on patient outcomes, safety incidents, and user satisfaction during pilot phases
 - ii. seeking to publish the work and sharing results from pilot programs globally to create future implementation and create a basis to make sure other medical ai models follow these implementations,
- g. endorsing the integration of human oversight into all AI assisted healthcare decisions with mandatory protocol to review and approve any AI decisions, AI system will only be used as decision-support tools and never a sole entity for the patient well-being,
- h. urging public reporting AI performance metrics to enhance transparency by proposing measures including but not limited to:
 - i. creating on online platform where healthcare organizations are required to publish data on AI systems accuracy and patient satisfaction scores,
 - ii. implementing regular audits of AI systems to ensure compliance with reporting standards and to share findings with public.