Topic A: Ethical Governance of Artificial Intelligence in Healthcare

Introduction

Artificial intelligence (AI) is increasingly shaping healthcare by enhancing diagnostic precision, informing clinical decision-making, and supporting improved patient outcomes. The World Health Organization (WHO) emphasizes that the ethical deployment of AI in health must prioritize human rights, transparency, and accountability, ensuring that AI applications contribute to equitable health outcomes while safeguarding patient privacy and autonomy.[1] WHO's Global Initiative on AI for Health further highlights the need for governance structures and normative guidance to support trustworthy adoption of AI technologies across diverse health systems.[2] These technological shifts also intersect with global labor dynamics, as automation in healthcare may alter skill requirements, redistribute clinical tasks, and influence migration patterns of health professionals between countries.

At the global policy level, the United Nations has articulated norms to guide the ethical governance of AI. In March 2024, the UN General Assembly adopted its first comprehensive resolution on AI, emphasizing the promotion of "safe, secure and trustworthy" AI systems that advance sustainable development and respect human rights, while calling for inclusive and equitable access to the benefits of AI technologies across nations.[3] This resolution stresses the need to address technological disparities, recognizing the uneven development between countries that could otherwise exacerbate existing inequalities in health and well-being.[4] Broader UN human rights resolutions similarly underscore that digital and emerging technologies must be governed to protect fundamental freedoms and prevent discrimination, providing a critical legal and ethical framework for AI governance in healthcare.[5] While these norms establish important global principles, they remain largely non-binding, highlighting gaps between international guidance and national implementation.

These developments directly support Sustainable Development Goal 3 (Good Health and Well-being), which seeks to ensure healthy lives and promote well-being for all at all ages. Yet as

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[1] World Health Organization. (2024). *Ethics and governance of artificial intelligence for health* (WHO Publication No. 9789240029200). WHO. https://www.who.int/publications/i/item/9789240029200

[2] World Health Organization. (2023). *Global Initiative on AI for Health*. WHO. https://www.who.int/initiatives/global-initiative-on-ai-for-health

[3] United Nations General Assembly. (2024). *Seizing the opportunities of safe, secure, and trustworthy artificial intelligence systems for sustainable development* (A/RES/78/L.49). UN. https://press.un.org/en/2024/ga12588.doc.htm

[4] United Nations General Assembly. (2024). *General Assembly adopts landmark resolution on AI* [Press release]. UN. https://press.un.org/en/2024/ga12588.doc.htm

[5] Human Rights Council. (2023). *New and emerging digital technologies and human rights* (A/HRC/53/L.27/Rev.1). UN. https://desapublications.un.org/sites/default/files/publications/2024-09/Technical%20Appendix%20%28Web%20version%29%201292024.pdf

AI-enabled tools such as telemedicine platforms and robotic surgery are deployed, disparities in access to advanced medical technologies between the Global North and South persist, risking the widening of health inequities unless addressed through coordinated global governance and capacity-building. Policymakers, health professionals, and international institutions face the challenge of designing regulatory frameworks that protect individual rights, uphold ethical standards, and ensure inclusive access to AI-driven healthcare innovations worldwide. Thus, Unequal access to AI-enabled healthcare may also intensify migration pressures, as health workers relocate toward better-resourced systems equipped with advanced technologies.

Current Situation

Despite widespread recognition of AI's potential to enhance healthcare systems, inequities in access, infrastructure, and persistence in constraining its adoption in low- and middle-income countries (LMICs). Structural barriers such as limited digital connectivity, insufficient high-quality health data, and a scarcity of local AI expertise hinder effective deployment of AI tools and risk perpetuating existing health disparities. For example, Africa carries a disproportionate share of the global disease burden while contributing a small fraction of data and AI research capacity, which can result in AI models that are less accurate or relevant for local health needs.[6] These disparities underscore the "AI divide" in global health, where populations in resource-constrained settings are less able to benefit from technological innovations such as predictive diagnostics and decision-support systems.[7] This AI divide may further reinforce dependency on foreign expertise and deepen imbalances in global health labor mobility.

At the national and non-governmental level, a growing number of partnerships and initiatives aim to expand responsible AI applications in underserved regions. The Horizon1000 initiative, a partnership between the Bill & Melinda Gates Foundation and OpenAI, has committed $50 million to deploy AI-assisted tools in primary health clinics across several African countries, beginning with Rwanda, to support clinical decision-making and alleviate health worker shortages.[8] In parallel, digital health platforms such as Babyl Rwanda have used machine learning to triage symptoms and enable over two million remote consultations, demonstrating tangible improvements in access and efficiency in rural settings.[9] Research-focused initiatives such as Artificial Intelligence for Global Health, funded by the International Development Research Centre (IDRC) and the UK Foreign, Commonwealth and

[6] Ouma, S., & colleagues (2025). *Artificial intelligence in global health: challenges and opportunities for equity in low-income countries*. *Health Affairs Scholar*.
[7] International perspectives on AI adoption barriers in LMICs and dataset representation disparities (see Ojo & Mbarika; PMC analysis).
[8] Gates Foundation & OpenAI partnership to expand AI in African healthcare systems (Horizon1000).
[9] Babyl Rwanda machine-learning triage platform facilitating remote consultations in LMIC settings.

Development Office, are investing in contextualized, people-centred AI solutions designed to improve health outcomes in the Global South.[10] Civil society networks like the Bay Area Global Health Alliance are also convening cross-sector discussions on responsible AI's role in strengthening primary care and leveraging technology for equitable health systems.[11] However, reliance on donor-driven and private-sector initiatives raises questions about long-term sustainability, local ownership, and regulatory oversight.

At the international policy level, the United Nations is advancing governance frameworks that explicitly address ethical, equitable, and sustainable AI development. Through Resolution A/RES/79/325, the UN General Assembly established the Independent International Scientific Panel on AI and the Global Dialogue on AI Governance to generate evidence-based guidance and foster inclusive global governance mechanisms.[12] These bodies are rooted in the Global Digital Compact (A/RES/79/1), which articulates a shared vision for an open and inclusive digital future that bridges technological divides.[13] Concurrently, the World Health Organization's Global Initiative on AI for Health (GI-AI4H) aims to develop normative guidance, standards, and capacity-building support to help countries—notably those with limited resources—implement ethical and effective AI in health systems.[14] WHO regional assessments also highlight the urgent need for legal safeguards, data governance, and AI literacy to ensure that AI advances do not deepen inequality but contribute to Universal Health Coverage and Sustainable Development Goal 3 (Good Health and Well-Being)[15] Persistent coordination challenges between UN bodies, national regulators, and private developers continue to complicate the translation of global principles into enforceable national policies.

Conclusion

While artificial intelligence holds transformative potential to advance global healthcare and support Sustainable Development Goal 3, its benefits will remain unevenly distributed unless persistent structural, ethical, and governance gaps are addressed. Disparities in digital infrastructure, data representation, and technical capacity risk entrenching existing health inequities, particularly between the Global North and South, while insufficient safeguards around transparency, accountability, and data protection raise concerns about bias, misuse, and erosion of patient trust.

[10] International Development Research Centre (IDRC) *Artificial Intelligence for Global Health* initiative.
[11] Bay Area Global Health Alliance AI and global health convenings on equitable technology use.
[12] United Nations General Assembly. (2025). *Resolution A/RES/79/325: Independent International Scientific Panel on AI & Global Dialogue on AI Governance*.
[13] United Nations. (2024). *Global Digital Compact (A/RES/79/1)*.
[14] World Health Organization. (2023–2025). *Global Initiative on AI for Health (GI-AI4H)*.
[15] United Nations & WHO calls for legal safeguards, data governance, and ethical frameworks for AI in health.

Bridging these gaps requires coordinated global action that strengthens regulatory oversight, embeds human-rights-based approaches, and invests in capacity-building for low- and middle-income countries. Through inclusive governance, robust international cooperation, and sustained commitment to ethical standards, AI can be harnessed not merely as a technological innovation but as a tool for equitable, safe, and sustainable health system strengthening worldwide.

Questions to Address

1. How can WHA ensure that AI in healthcare is implemented transparently and accountably, minimizing risks of misuse or harm?
2. What measures can WHA propose to prevent bias, discrimination, or inequitable outcomes in AI-driven diagnostics and patient care?
3. How should patient privacy and data protection be maintained while allowing AI systems to access and learn from medical datasets?
4. How can WHA support low- and middle-income countries in developing the regulatory capacity, digital infrastructure, and technical expertise needed for the ethical and effective use of AI in healthcare?
5. What role should WHO-led international cooperation and normative guidance play in harmonizing AI governance standards across health systems while respecting national contexts?

Topic B: Mental Health and Well-being in the Digital Age

Introduction

Mental ill-health related to digital environments is increasingly recognized as a pandemic-scale challenge affecting psychological resilience and well-being across the lifespan. This framing underscores the scale of the issue and justifies international policy attention. Emerging evidence shows that problematic patterns of digital engagement—including compulsive screen use, social media over-reliance, and distress-driven interactions—are associated with anxiety, depression, sleep disruption, and other adverse mental health outcomes, especially among adolescents and young adults.[16] A WHO Regional Office for Europe policy brief highlights that a rising proportion of youth exhibit signs of problematic social media behavior and gaming, with vulnerable groups disproportionately experiencing these harms, indicating a digital influence on mental well-being that can worsen with increased use and psychological need.[17] Concurrently,

[16] World Health Organization Regional Office for Europe. (2025). *Teens, screens and mental health* — WHO report indicating rising problematic digital behavior among adolescents and its impact. https://www.who.int/europe/news/item/25-09-2024-teens--screens-and-mental-health

[17] World Health Organization Regional Office for Europe. (2025). *Addressing the digital determinants of youth mental health and well-being: policy brief* — Priority actions for digital environments. https://iris.who.int/handle/10665/381496

academic reviews identify links between digital media exposure and body image concerns, social comparison, and internalizing symptoms, underscoring how online environments can shape emotional processes and self-perception.[18]

Addressing these pervasive psychological impacts requires public health strategies that go beyond traditional biomedical models to build psychological resilience and support mental well-being in digitally mediated contexts. The United Nations' Sustainable Development Goal 3.4 commits Member States to "promote mental health and well-being" by 2030, recognizing mental health as central to the global health agenda.[19] WHO's digital determinants policy brief urges evidence-informed national actions to protect youth mental health in digital settings, including regulatory, educational, and community-based interventions to mitigate harms associated with social media, artificial intelligence, and other digital technologies.[20] As digital platforms continue shaping everyday life, creating ecosystems that support healthy, balanced engagement—and integrating mental health considerations into digital policy—is essential to ensuring that connectivity enhances, rather than undermines, psychological well-being. This establishes a clear policy objective for digital governance frameworks.

Current Situation

The mental health impacts of pervasive digital engagement have reached global proportions, with international health authorities characterizing problematic screen and social media use among young people as a significant public-health concern. Data from the World Health Organization's *Health Behaviour in School-aged Children* (HBSC) study indicate that rates of problematic social media behaviour among adolescents across 44 countries increased from 7 % in 2018 to 11 % in 2022, while risk for problematic gaming behaviours was similarly notable, raising concerns about emotional distress and developmental harms associated with hyper-connectivity.[21] Empirical research further links excessive digital engagement with anxiety, depression, sleep disruption, and other psychological symptoms, particularly when use becomes compulsive or interferes with daily functioning.[22]

Importantly, these digital influences are not uniform across the globe. A multi-country UNICEF-supported study found that adolescents in Africa, the Americas, Europe, and Asia

[18] Mesce, M., Cerniglia, L., & Cimino, S. (2022). *Body image concerns and digital technology addictions in adolescents*. Behavioral Sciences, 12(8), 255. https://www.mdpi.com/2076-328X/12/8/255
[19] United Nations. (2015). *Sustainable Development Goal 3: Ensure healthy lives and promote well-being for all at all ages*, including Target 3.4 on promoting mental health and well-being. https://sdgs.un.org/goals/goal3
[20] WHO Regional Office for Europe. (2025). *Digital determinants of youth mental health*.
[21] World Health Organization Regional Office for Europe. (2024). *Teens, screens and mental health*. https://www.who.int/europe/news/item/25-09-2024-teens--screens-and-mental-health
[22] PubMed study on screen/social media impacts: *Impact of screen and social media use on mental health*. https://pubmed.ncbi.nlm.nih.gov/40784833/

frequently associated digital communication with social comparison, harassment, and other stressors negatively affecting their well-being.[23] These findings demonstrate that the mental health impacts of digital engagement are widespread and multifaceted, affecting child and adolescent populations in diverse cultural and socioeconomic contexts. This highlights the urgent need for coordinated, evidence-based strategies that can address both universal and region-specific challenges.

Governments and health systems are beginning to respond with policy innovations and targeted interventions. In *Australia*, a nationwide law implemented in late 2025 prohibits children under 16 from accessing major social media platforms such as Instagram and TikTok to reduce exposure to harmful content, cyberbullying, and algorithm-driven addiction patterns.[24] In *Chile*, legislation adopted for 2026 bans smartphone use during class time for elementary and middle school students, following pilot programs that showed digital distractions negatively affected focus and social interaction.[25] European countries, including *the Netherlands* and *Finland*, have issued public health advisories and laws to restrict social media use among younger children or limit mobile phone access during school hours, supporting digital resilience and mental health.[26]

Other countries have developed complementary strategies. In *India's Karnataka state*, the government partnered with the National Institute of Mental Health and Neurosciences to promote responsible digital habits among students, emphasizing early intervention and community engagement.[27] In *South Korea*, state-funded digital detox and treatment programs target youth with problematic tech use, reflecting culturally specific approaches to technology addiction.[28] These national actions align with WHO policy guidance urging Member States to address the digital determinants of youth mental health through multi-sectoral, evidence-informed strategies.[29] Nevertheless, gaps remain in regulatory frameworks, service coverage, and global coordination, particularly in low- and middle-income countries, highlighting the need for

[23] UNICEF. (2025). *Childhood in a Digital World*. https://www.unicef.org/innocenti/reports/childhood-digital-world
[24] Australia's social media ban for under-16s. https://time.com/7339762/australia-youth-social-media-ban-under-16-snapchat-meta-tiktok/
[25] Chile bans phones during class. https://apnews.com/article/06468ac5bb1d4c546e081d29cb16ad84
[26] Netherlands and Finland social media guidance. https://apnews.com/article/bd4c197181298ec5099967867233fc1b
[27] Karnataka government collaborates with NIMHANS. https://timesofindia.indiatimes.com/city/bengaluru/govt-collaborates-with-nimhans-to-promote-responsible-digital-habits/articleshow/124643920.cms
[28] South Korea digital detox programs. https://www.lemonde.fr/en/international/article/2025/10/17/in-south-korea-digital-detox-centers-are-tackling-the-country-s-growing-tech-addiction_6746507_4.html
[29] WHO. (2025). *Addressing the digital determinants of youth mental health and well-being: policy brief*. https://iris.who.int/handle/10665/381496

continued international cooperation to achieve Sustainable Development Goal 3.4: promoting mental health and well-being for all.[30]

Conclusion

The growing mental health consequences of pervasive digital engagement underscore the urgent need for coordinated global action that treats digital environments as a core public health concern rather than a peripheral social issue. Evidence from multiple regions demonstrates that unregulated digital platforms can exacerbate psychological distress, particularly among children and adolescents, while uneven national responses risk widening existing health and equity gaps. Although several countries have begun implementing preventive regulations, educational initiatives, and treatment programs, these efforts remain fragmented and unevenly accessible, especially in low- and middle-income contexts.

To address these challenges effectively, international governance frameworks must integrate mental health protections into digital policy, ensuring that technological innovation aligns with human rights, equity, and well-being. The World Health Organization and United Nations are uniquely positioned to support this process by promoting evidence-based standards, facilitating knowledge sharing, and strengthening capacity-building across regions. Ultimately, safeguarding mental well-being in digital environments requires a balanced approach that combines regulation, public awareness, and youth-centered resilience strategies, ensuring that digital connectivity contributes to healthy development and advances the global commitment under Sustainable Development Goal 3.4.

Questions to Address

1. What regulatory frameworks or guidelines should Member States consider to protect children and adolescents from harmful digital content while balancing access to beneficial technologies?
2. How can interventions ensure equitable access to mental health services for youth in both high-income and low- and middle-income countries, in line with SDG 3.4 and UNICEF recommendations?
3. What role should collaboration between health, education, technology sectors, and civil society play in preventing digital mental health harms, and how can WHO guidance support these efforts?

[30] WHO. (n.d.). *SDG target 3.4: Promote mental health and well-being*. https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/sdg-target-3.4-noncommunicable-diseases-and-mental-health

4. What mechanisms and metrics should Member States adopt to track digital mental health risks and evaluate the effectiveness of interventions across different populations?